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ABSTRACT

The final report of the Swedish Committee for Internationalizing University Education, analyzing the motives and objectives for internationalization and proposing means for internationalization, is summarized in this document. Internationalization, as investigated by the committee, consists of lending global perspectives to curricula in higher education. The reasons for internationalizing were found to be primarily the need for international cooperation in solving problems that affect all nations, such as resource allocation, and secondarily to prepare students for vocational duties requiring international perspectives. In this context the committee's final report considers Sweden's whole education system, the educational goals that must be realized to bring about internationalization, the schooling on which higher education builds, teacher training, the problems involved in introducing new goals, administrative and functional changes needed in universities, exchange of teachers and students, and models for internationalization of course content. Proposals are included for two theme courses that might introduce or conclude an academic course of study and for specific courses in the humanities and social sciences that might serve as models for other areas like law and engineering. Special emphasis is given to courses for "training in professional languages," that is, the use of foreign language learning as a means toward internationalizing the vocational potential of university graduates. (JH)

Internationalizing Education

Summary of reports from
the Swedish Committee
for Internationalizing University Education

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U S DEPARTMENT OF HEALTH,
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Preface

Several events occurring in 1974 mark the importance accorded to education and research for international coexistence and collaboration and for solving the global life problems. The United Nations University has been established. Unesco's General Assembly will be called upon to consider a recommendation concerning education for international understanding, cooperation and peace and education relating to human rights and fundamental freedoms. The importance of educational and research cooperation for peace has been stressed at the ongoing Conference on Security and Cooperation in Europe.

This summary of viewpoints and proposals on internationalizing education may be seen as a contribution to these endeavors.

The committee whose five reports are summarized in this publication was appointed in 1972 by the Office of the Chancellor of the Swedish Universities. It sets worldwide solidarity as the main goal of internationalizing education at all levels. The introduction of an international dimension in all education is seen as one of the measures needed to permit human coexistence in a shrinking world. Education must also see to it that different kinds of vocational pursuits acquire an increasing international component.

The committee has sought to benefit from experiences in other countries. This summary of its reports may perhaps give something in return. Above all, however, I hope that we shall receive comments and criticism from other countries. Such material will be useful to the Swedish educational authorities who are now being called upon to decide about the committee's final proposals.

Underlying this publication is the conviction that all people on this earth are interdependent and that education must help to solve the international problems and, in so doing, secure the future of mankind.

Hans Löwbeer
Chancellor of the Swedish Universities

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A short summary has been published in the information bulletin of the Swedish Institute (Current Sweden, Actualités suédoises, Actualidades de Suecia, Aktuelle Informationen aus Schweden)

1 The Swedish educational system

1.1 Primary and secondary education

Sweden has a nine-year comprehensive school which children begin at the age of seven. At sixteen they move on to an upper secondary school, where they may choose between three main lines: three-year theoretical, two-year theoretical and usually two-year vocational. The objective is to have 90 % of the pupils continue in some form of upper secondary education.

The teachers may be divided into four main categories. Lower-level teachers (grades 1—3 of the primary school) and middle-level teachers (grades 4—6) receive all their training at teachers colleges (schools of education). The subject teachers (grades 7—9 of the comprehensive school plus upper secondary) first graduate from universities and then take practical training at teachers colleges. The fourth category consists of teachers in gymnastics, music and drawing, home economics, vocations etc.

1.2 Universities and professional schools

There are many varieties of postsecondary or tertiary education; here we deal only with education at university level (including professional schools). The normal foundation for university studies is one of the three-year theoretical lines in a secondary school. Thus a student can enter university at the age of 19 (20 after military service) and after 12 years of schooling. The Government has decided that in principle all secondary school lines will qualify for entrance to university from the mid-1970s. Special entrance requirements will then be stipulated depending on the type of university studies contemplated. Other trends are to recruit people who have had jobs for some years and to view the university period as a step in recurrent education.

About 110,000 students are enrolled in the universities and professional schools.

With regard to entrance opportunities the universities can be divided into two groups: the "free faculties" (theology, law, humanities, social sciences, natural sciences) which in principle set no admission quotas, and other faculties (such as medicine and engineering) which set such quotas.

All universities and professional schools (except for the School of Business Administration and Economics in Stockholm) are state institutions. Most of them come under the supervision of the Office of the Chancellor of the Swedish Universities. The main guidelines for their curricula are determined by the office, whereas each university decides its own study literature and variants in course content.

The Swedish universities and educational institutions at university level are as follows:

Universities

University of Uppsala (theology, law, medicine, humanities, social sciences, mathematics and natural sciences, pharmacy)

University of Lund (theology, law, medicine, humanities, social sciences, mathematics and natural sciences, dentistry, engineering)

University of Stockholm (law, humanities, social sciences, mathematics and natural sciences)

University of Göteborg (medicine, humanities, social sciences, mathematics and natural sciences, dentistry)

University of Umeå (medicine, humanities, social sciences, mathematics and natural sciences, dentistry)

University Center of Linköping (medicine, engineering; and at undergraduate level: humanities, social sciences, mathematics and natural sciences)

Professional schools

Caroline Medico-Surgical Institute, Stockholm (medicine, dentistry)

Institute of Technology, Stockholm

Institute of Technology, Göteborg

Center of Engineering, Luleå (partial)

School of Business Administration and Economics, Stockholm (private school under public regulation)

Agricultural College, Uppsala

College of Forestry, Stockholm

Veterinary College, Stockholm

Schools of Journalism in Stockholm and Göteborg

Schools of Social Work and Public Administration in Stockholm, Lund, Göteborg, Örebro, Umeå and Östersund (training mainly welfare agency staff and local government officers)

Teachers Colleges in Falun, Gävle, Göteborg, Härnösand, Jönköping, Kalmar, Karlstad, Kristianstad, Linköping, Luleå, Malmö, Stockholm, Umeå, Uppsala and Växjö (providing subject training and pedagogy for classroom teachers of primary schools, as well as pedagogy for subject teachers of secondary schools; the latter get their subject training at the universities).

As is evident from the above, in some cases the same training can be obtained either at a university or professional school (e.g. medicine or engineering). The two forms are completely equivalent, however. It should be pointed out that business administration and economics can also be studied at the university social science faculties.

The largest institutions are the universities of Uppsala, Lund, Stockholm and Göteborg, having 15,000—20,000 students each.

1.3 Education at the universities and professional schools

The "philosophical faculties" (humanities, social sciences, mathematics and natural sciences) feature a common educational system based on "points". One point represents one week's full-time studies. In one

academic year a student is expected to manage 40 points, divided into 20 points for each of the autumn and spring terms. Many students take longer, however. The first degree is the "filosofie kandidatexamen", abbreviated to "fil.kand." or F.K. It is roughly the Swedish equivalent of a B.A., B.Sc. or B.Econ. This degree requires 120 points and the normal period of study has been set at three years but often works out longer in practice.

A number of various educational programs (also called "lines of studies") lead to the F.K. degree. The choice of subjects in any one program is partly predetermined, with different subjects being taken in a particular sequence. During his first year a student normally studies only one fixed subject, the second year he may choose among several subjects and the third year his choice is completely free. But students have also possibility of composing their own educational program. The study of most subjects leads to 20 or 40 points (in some cases 10 points). Most subjects can be pursued further up to 80 points. A program leading to the F.K. degree usually consists of study in 2—4 subjects.

After completing his undergraduate work, recognized by the first degree, a student may continue with postgraduate studies leading to a doctor's degree. This involves only one subject, in which at least 60 points are required for admission to the postgraduate or research level. At least four years following the F.K. degree are normally needed for doctoral studies, which include writing a scientific dissertation, the doctoral thesis.

Thus there is no Swedish equivalent of the Master's degree. By continuing to study one or two subjects past the F.K. degree, of course, a student can achieve a knowledge level comparable to that of a Master's degree.

The educational system described above refers to the faculties of humanities, social sciences, and mathematics and natural sciences. Systems and length of study vary for other types of university education, but there is still a first degree and a doctorate (except for schools of journalism, social work and public administration, and teachers colleges).

The periods of study which have been determined as standard for basic degrees

in various disciplines are as follows: theology 3 1/2 years, law 4 1/2 years, medicine 5 1/2 years, dentistry 5 years, pharmacy 4 years, engineering 4 years, agriculture 4 years, forestry 4 years and veterinary medicine 5 1/2 years.

1.4 Organization of the universities

The Office of the Chancellor of the Swedish Universities is an autonomous civil service department under the Ministry of Education. It is the central administrative authority for the universities.

The board of a university is its Senate, consisting mainly of the professors who are chairmen of the various faculties. Current business is dealt with by the Office of the Vice-Chancellor. The universities are divided into faculties, some of which may be subdivided into sections. Each faculty or section has a joint teacher-student council authorized to take decisions on educational matters (e.g. local curriculum design).

Education and research within the faculties take place in departments specializing in one subject, sometimes more than one subject.

Board membership at some of the professional schools includes persons representing other sections of the community. Adoption of this system can also be expected in the case of the universities.

University operations are financed almost entirely out of government budget appropriations which are voted each year by Parliament (*riksdag*). In addition, grants to research projects are made by the national research councils. Private endowments and industry-sponsored research play a minor role in financing.

1.5 Financing student costs of living

All students qualify for state-provided study assistance (*studiemedel*) if they largely

adhere to the normal scholastic pace. This assistance covers the necessary costs of living. A smaller portion amounts to a bursary which need not be repaid. The greater portion is a special type of state loan, repayable over a long period pursuant to separate rules.

Students in the postgraduate curriculum, i.e. doing research to qualify for the doctorate, may obtain non-repayable state fellowships to cover the necessary living costs. However, there are not enough of these. Many graduates support themselves by taking jobs as assistant lecturers or researchers at the universities. Study assistance is also used to help finance the training of researchers.

The foregoing holds for Swedish students. Visiting students from abroad are not eligible for the study assistance; see section 9.3.6.

1.6 Reforms

Reform is constantly going on in the realm of higher education with respect to changes in organization, intake capacity, educational programs, curricula etc. The work described in this publication is part of a never-ending review process.

A major governmental commission of inquiry (called U 68) has been working for some years on problems relating to the organization, capacity and location of higher educational facilities. Its main report was published in March 1973, with recommendations that may shape the future of university education in Sweden from the mid-1970s on.

Parliament will consider the U 68 recommendations in autumn 1974. Among the questions on the agenda is an expansion of the area covered by higher education and the adoption of overall admission quotas (*numerus clausus*).

2 The Internationalization Committee and its work

2.1 Composition of the committee

In a speech in 1970 the Swedish Prime Minister, Mr. Olof Palme, said, "We want to internationalize Swedish society. This is one of the most important tasks of the seventies. And that means we must internationalize our educational system." The commission of inquiry mentioned above (U 68) proposed internationalization as one of the main goals that the universities should promote.

At the beginning of 1972 the Office of the Chancellor of the Swedish universities appointed a special committee to work more closely on the internationalization of university education. The committee consisted of the following members: Bertil Östergren (former director of the Swedish Confederation of Professional Associations), chairman; Mathias Berg (a student of social sciences and representative of the National Union of Students), Sune Carlson (professor of business administration and economics, University of Uppsala, former director of the UN Bureau of Economic Affairs), Anders Forsse (assistant director-general, Swedish International Development Authority), Helge Hane (personnel manager, Alfa-Laval Company), Lennart Holm (director-general, National Board of Urban Planning, former professor of architecture), Tore Tallroth (ambassador, Ministry for Foreign Affairs); Birgit Ahlberg and Benny Jonsson (section heads, Office of the Chancellor of the Swedish Universities), secretaries.

The committee deliberated with a reference group consisting of 15 representatives from various interest groups outside the universities. Subcommittees of experts were constituted to deal with special tasks, in addition to which university teachers were engaged to furnish expertise in various disciplines.

2.2 Tasks of the committee

The committee's main task has been to analyze motives and objectives for increased internationalization in the area of higher education and to put forward proposals in the light of this analysis. It was to evaluate all types of needs and measures: universal internationalization of education, vocational skills for international service and jobs in other countries, knowledge of foreign languages, studies abroad and the international exchange of university staff. Since it was impossible to put forward proposals for total curriculum revision, the committee thought it advisable to devise models and prototypes on internationalizing the educational content. The committee was also called upon to draft instructions to govern how education could be internationalized on a continuous basis.

2.3 The committee's work

We began our work with an outline survey of needs and wishes relating to internationalized education. The material for this survey was obtained in two ways: (a) responses to a written questionnaire addressed to various interest groups in the community; (b) discussions with representatives of teachers and students at universities and professional schools. We also set about to collect foreign empirical data in this area.

A fundamental conclusion drawn from the survey work was that the need for internationalized education cannot be quantitatively defined. That is because the need is universal. This being so, we observed that the central quest must be increased internationalization of all studies. We have therefore found three types of measures to be most important: to internationalize the content of all studies generally, to enlarge language training for all educational groups and

to intensify the international exchange of students and teachers. Such a general internationalization of all education is more important than to offer specialized international studies to certain limited groups. But it is also more difficult to bring into being, which means that the task must be tackled with redoubled energies.

In our opinion the pivotal weight that must be put on creating an international perspective in all education argues for viewing the educational system as a whole. Even though our main concern was with university education, it follows that we have also taken up the internationalization of primary and secondary education. We accord high priority to internationalizing the academic education and in-service training of school-teachers. Moreover, we have held discussions with the popular education associations about internationalizing their activities.

The prospects for internationalizing university education will depend largely on the universities themselves: their ability to innovate, the organization, resources and managerial talents they command, and the

thrust of their research. We have therefore also undertaken to discuss such matters which affect university policy in general.

In three preliminary reports, I, II and IV, we have put forward proposals for specialized international studies, mainly in the social sciences area but in several instances of interdisciplinary character; the substance of these reports is set out in section 7.7.5—7.7.9.

In another preliminary report (III) the whole question of internationalizing education was subjected to a debate of principle. The comments on this report coming from universities and professional schools, student unions, government agencies and various organizations in the community guided us in the closing phase of our work.

The final report (V), published in September 1974, contains our main proposals. Although the present summary chiefly builds upon this report, it includes the cardinal viewpoints and proposals presented in earlier reports. The summarized reports encompass about 450 printed pages in all.

3 Internationalizing education: needs, motives and goals

3.1 The process of internationalization

We use the term, "internationalization process", to designate the trend towards greater dependence and teamwork between countries and peoples. It affects many areas: economics, trade and politics, the world of work and the labor market, information and physical communications, the need to solve global problems (e.g. population growth, allocation of welfare, pollution and natural resources). The process generates needs to make education more international. But our assessments and proposals are not solely based on the need to adjust to the internationalization process. We have proceeded from an ideological value judgment, namely that internationalization makes a desirable road along which to travel, with education to serve as one of the conveyances.

Naturally, not every element of the process is positive or desirable. Thus internationalizing the economy may have some undesirable consequences, an aspect brought out by the debate on multinational companies. A serious development on the world scene is the widening gap in material standards between an affluent minority of the earth's population in the industrialized countries and a poverty-stricken majority in the developing countries. This could pose one of the gravest threats to world détente. Education must not be harnessed to imperialistic strivings but must be made to promote equality and solidarity between countries and peoples. Among other things, education should serve to invalidate the traditional Western attitude to the developing countries.

The incidence of negative and problematic elements notwithstanding, the trend towards increased internationalization is not only largely inevitable but also overwhelmingly positive. Not least positive is the grow-

ing insight that the crucial problems of survival are indeed global, and as such can only be solved by countries and peoples working together.

The fact that growing international interdependence brings problems and drawbacks in its train provides all the greater inducement to internationalize education. To gain insight into the internationalization process, and with that the tools to evaluate and influence it, we must have internationally oriented knowledge, attitudes and skills. An internationalized education will have to take up problems from different aspects and be critical and value-conscious.

Many people think the problems of global survival will assume decisive crisis proportions within a few decades. In that case those who are now being educated will be called upon to solve these problems and go on living in an internationalized world or not survive at all.

Schools and universities have yet to adapt adequately to the process of internationalization and the demands of international co-existence.

3.2 Motives for an internationalized education

In our preliminary reports we distinguished between a general motive for internationalizing education and a labor market motive.

The general internationalization motive

In speaking of a world that has shrunk the reference may be to proliferated communications and ties between countries and peoples as a result mostly of economic growth and technological advance. Anyone who is going to be able to function as citizen of a society more and more internationalized will have to be armed with

attitudes, knowledge and skills that relate not only to his own nation or culture but also to the world at large.

But the fact that the world has shrunk means something more, too. It has become increasingly clear that many of the crucial life problems are of global extent and can only be solved in international collaboration. A citizen of the world that is now emerging should command an education that not only makes him aware of problems unrestricted to the home nation or culture but also capable of helping to solve them.

We see education for international solidarity as the core of the general internationalization motive. It is this ideological value judgment, call it instilling a sense of world citizenship, that we wanted to be primarily controlling of the positions we have taken.

Naturally, this is not to suggest that education should try to eliminate affinity with one's close-in environment or nation. The global life problems also bear crucially upon the basic determinants of individual and national life. In short, internationalization is a national interest.

Conflicts are of course bound to arise between short-term national interests which are contrary to the internationalistic endeavors and long-term national interests which coincide with these. So our conception of the general internationalization motive harbors this: we want to emphasize the longer-ranging but still relatively near-at-hand perspective on which the national and international interests converge.

In saying that one goal of education is to instill a sense of and responsibility for world citizenship, we naturally do not mean that people can or should renounce their national origin. The national bonds of common purpose need to be replenished and enlarged, not eliminated.

We consider it a national interest to have education create:

- a) increased insight into the home nation's determinants in a rapidly changing world;
- b) increased understanding, and hence respect, for conditions which stem from antecedents other than those in the home nation or culture;
- c) increased ability to take part in and influence the interplay between conditions of local or national origin and factors of multi-national or universal import.

The general internationalization motive must pervade primary and secondary education. But it must also be central at university level. The broadened overview that higher education ought to offer can and should have many perspectives, among them

the historical perspective, which is calculated to put the development of national affairs under the illumination of history as it unfolds in other countries and to improve understanding of other people's situations in the light of their history;

the economic-social perspective, which adverts to international economic relations, their interaction with national economies and the interplay between economic and social tendencies in the home country and other countries;

the resources-related perspective, which can illuminate the dependence of humanity and hence of the home country on natural resources, broadly interpreted, as well as their management and mismanagement;

the political perspective, which among other things can deepen insight into the allocation of world roles between relatively powerful and weak states and groups of states;

the cultural perspective, which can afford insight into different kinds of cultures and religions and, flowing from this, insight into the relativity of the culture concept and a deeper perspective on development of the home culture;

the communications-related perspective, which confers ability to partake of information in other languages and to communicate with the surrounding world.

Almost all education at universities and professional schools should embody one or more of these perspectives in line with the general internationalization motive.

The labor market motive

This is interpreted to mean that university education must adapt to the fact that more and more vocational duties are rapidly taking on an international flavor. For a good example one need only look at the Swedish economy, which depends so much on foreign trade. Some university graduates will be devoting themselves to internationally oriented tasks, either in Sweden or outside. But it will become even more common

for ordinary tasks in Sweden to incorporate an ever wider, highly diversified spectrum ranging from the ability to read professional literature in foreign languages to participation in joint international projects. It follows that the labor market motive contains a general as well as more specific substance. It is the general substance which must be given greatest weight, while specialized international studies should at the same time be offered to those students who so desire.

The fact that education must train for certain careers must not be permitted to tie down the subject matter to present-day occupational patterns, to usurp education's commitment to the total life of the mind and spirit, or to let short-term national or regional interests bulk inordinately large in educational planning.

Education oriented to the labor market must provide flexibility, i.e. a readiness to cope with tasks that change in response to many developments, as on the international scene.

The general internationalization motive superordinates the labor market motive

An observation which our final report underlines more strongly than the preliminary reports is the primacy we attach to the general internationalization motive. Accordingly, the labor market motive is to be seen as a derivative of this general motive. Our conception implies that the two classes of motives are in no way irreconcilable.

Obviously, the practical design of course content may give rise to trade-off problems. Generally speaking, we maintain that a university education will often best serve the future career if it provides overview and perspective, theoretical foundations and critical appreciation of impelling forces and problem complexities.

3.3 Educational goals

3.3.1 Educational goals and planning

In our opinion educational planning ought to proceed from overarching social goals (level 1). These may then be used to derive general goals for attitudes, knowledge and skills (level 2). The next step is to convert them into goals and means for educational programs (level 3) and after that into operative goals and means for courses of study (level 4). Most of the latter work will be done in the local educational planning.

Educational goals at levels 1 and 2 will be discussed in this section. In section 7 we give examples of applying the goals at levels 3 and 4.

3.3.2 The overarching goal

Internationalism lies in the very idea of the university, which is to create and impart new knowledge detached from prevalent notions and national and other constraints. But in the course of university history different special interests, based nationally, locally or in groups, have interposed barriers to this mission. An internationalization of university education must enable the universities to realize this basic idea in the best possible manner and to develop it in deference to newly discovered problems for humanity and increasing international interdependencies.

We have formulated the overarching goal for internationalizing university education as follows:

- An internationalization of university education seeks to foster international cooperation and international solidarity, which also falls in line with long-term national interests. This is to be chiefly provided for in that education will create global openness, awareness and readiness to act as well as understanding and respect for other peoples and cultures, in that it will give knowledge related to the world as a whole and promote the ability to communicate internationally, and in that it will prepare for a career with increasing international components. Because of the broadened and deepened perspectives which are thereby achieved, the internationalization of education will form an integral part of the university's ambition to inculcate in the students an all-round, critical and value-conscious thinking and mode of tackling problems. It also lies in the internationalization of education that this should be comparable and competitive as far as possible with education in other countries.

3.3.3 General goals for attitudes, knowledge and skills

Attitudes

Like every other activity, education creates and affects attitudes. One must be aware of which kinds of attitudes education fosters.

We have proposed formulating the attitude goals as follows:

- open-mindedness, understanding and respect for all peoples, their cultures, values and life patterns;
- insight into the relativity of one's own or national circumstances, values and life patterns;
- a positive attitude to international cooperation and international solidarity, as well as readiness and resolve to work for these.

There is a strong connection between the attitude and knowledge goals. Hence a cardinal task for the university will be to increase knowledge of relationships and interdependencies in order to further a more sophisticated approach and a clearer insight into the importance of various social and cultural factors for international problems. University education may also shape attitudes in the sense of making the students aware that areas and problems which they used to regard as technical or neutral actually contain or are bound up with value judgments, on which they will have to take stands or at least be conscious of.

Considered from the aspect of developing attitudes, the content and methods of university instruction stand out as extremely important means. Obviously, this must not be a matter of letting teacher-led instruction or group work aim at any kind of monolithic conformism. The real crux is to give the students an all-round, critical, and value-conscious instruction designed to get them sufficiently involved and to impart the full-bodied information base that will enable them to make up their own minds. As we see it, to hold an attitude means more than just forming an opinion and being ready to act on a particular matter. It also presupposes the ability to distinguish and recognize the problem's crucial qualities in a complex situation, to grasp relationships and to analyze causes and consequences in view of the governing circumstances, and to reason cogently in defense of the position taken.

General knowledge

We have proposed formulating the knowledge goals as follows:

- knowledge of conditions in other countries—mainly through awareness of different political, social, cultural, religious and economic structures and their interrelationship—and of the different types of relations between countries and peoples.

It will be up to the schools at primary and secondary level to build the best possible corpus of knowledge about other countries and about international problems. But such knowledge can also be imparted by many subjects at university level, albeit in varying degree. It will provide points of comparison and reference for information about one's own national conditions. Even if this has to be done at some expense of other subject matter, especially descriptive material in earlier curricula, education as a whole would probably gain from the resulting expansion of the students' frame of reference and their increasing insight into dependencies on surrounding social and cultural structures.

General skills

We have expressed the skill goals in these words:

- ability to communicate, including skill in foreign language and the ability to establish rapport in foreign milieus;
- skill in retrieving information about other countries and international conditions;
- ability to make comparative analyses.

In our survey work and in the comments on our preliminary reports the one question that kept cropping up with repeated insistence was the importance of skills in foreign languages. The universities, we were told, must not restrict themselves to training prospective language teachers and other linguistic specialists. They must improve and develop skills in foreign languages among all categories of students.

The following goals should be formulated for the universities and professional schools in respect of languages:

- university education shall aid all categories of students to attain a level of competence so that they can read and understand speech without difficulty and passably write and speak at least one

foreign language, normally English, in their professional field;

- those students who have taken French or German as a second or third foreign language in secondary school shall, by means of various concrete measures, be encouraged and enabled to maintain or improve their skills in this language and to deepen them within their professional field;
- university students and university staff shall be afforded the utmost opportunity to take specialized language courses adapted to their needs; such training shall be offered in several different languages and concentrate on different skills and levels; language courses should also be adapted to the needs of the gainfully employed.

These goals can be met in two ways: first, by language training within the ambit of a subject major; and second, by special language courses addressed to the needs of different student categories.

Specific vocational knowledge and skills

We have set up the following goals under this head:

- specific vocational knowledge and skills for internationally oriented employment;
- knowledge of the policies and terms of employment governing one's own occupation in other countries and within international organizations.

Whereas the earlier goals held in principle for all students, most of the goals here discussed refer mainly to one segment of the student population, consisting of those who elect study variants with a special international focus.

3.3.4 International comparability and competitiveness

We set out two main reasons why university education in Sweden should aspire to international comparability and competitiveness. The one is the desirability of international mobility on the labor market. The other is the need to facilitate transfers between Swedish and foreign educational systems. The aim should not be to standardize educational content but rather to achieve structural similarity in respect of level and gen-

eral direction, especially in relation to those countries with which Sweden has the strongest ties.

Even though we have not submitted proposals which exclusively aim at international comparability and competitiveness, their nature is such as to serve this purpose as well. Moreover, satisfaction of the goals we have set up will improve the employment prospects of graduates abroad.

It is important to know more about the design of foreign university education. The Swedish reform work should accommodate comparisons with foreign education to a greater extent than has been the practice up to now.

3.3.5 Goal conflicts

We distinguish between external and internal goal conflicts. External goal conflicts arise when the internationalization goal is at variance with other goals for higher education. Internal goal conflicts are those between various sub-goals of internationalized education.

External goal conflicts

Education often seems to have been designed without any prior analysis of overarching social goals. As a result such goals have not always guided the priorities deliberately assigned to studies in terms of their content. It is all too easy to imagine at any one point in time that the content of educational programs and study courses is so well balanced and so compressed that nothing can be removed in order to add something else. But the content of studies has always been changed down through the years in that existing material has disappeared and new material been put in its place. Such changes have responded not only to the march of science or to the obsolescence of older subject matter and disciplines. They have also responded to changing values about what is regarded as dispensable and indispensable.

Whenever a trade-off has to be struck between different educational goals, the internationalization goals do not deserve lower priority merely because they are new, while other goals rate higher priority just because they already exist. It is what the future needs that must be determining.

There lurks a danger that education's labor market focus will be determined by

earlier or current conditions rather than create the ability to deal with tomorrow's job problems. There is also a risk of continued rigid adherence to earlier patterns in regard to the "quality of education".

Naturally, no single concept of quality can be made to cover education. The qualities are several, and they come in different kinds. Owing to various inertias, it lies ready to hand to build up education to match the quality-criterion profile of a vanished era (or at best a contemporary profile) and to ignore what the future wants. Considering how fast the world is now moving towards greater global dependence, to mention just one factor, the generations who are going to work around 2000 A.D. will need ability to cope successfully with the changes dictated by increased internationalization. That is one of the foremost quality criteria which education must satisfy.

In a future perspective—and that is the perspective in which education has to operate—there is no risk that the internationalization goals will be assigned too high a priority over other, apparently more immediate and obtrusive goals.

Since certain stipulated periods of normal study are in force for different kinds of education, the time dimension could cause problems of competition between internationally oriented and other learning if internationalization were primarily seen as a question of adding increments to descriptive material. Even though a strong case can be argued for substitution of material in some cases, the internationalization of educational content boils down first and foremost to changing perspectives, to changing the selection of examples, and to presenting models, theories and solutions so as to make clear their dependence on dissimilarities in physical, social, economic and cultural conditions.

In some cases, however, the limited study period can make it difficult to internationalize education. Moreover, it is bound to in-

crease certain costs, especially where the international exchange of university staff and students is concerned.

Internal goal conflicts

In our preliminary report III we pointed out that the thrust of internationalization was affected by the following: (a) that the international responsibility was global, hence not limited to our culture, and that it would be necessary to liberate minds from a monolithic Western outlook on world problems; (b) that Sweden's external dealings were highly concentrated on the other Nordic countries (Denmark, Norway, Finland and Iceland), Western Europe and North America. We contended that both perspectives should be given a fair go and that balance and synthesis should be achieved.

According to some of the submissions received on this report, we have accorded inordinate weight to the needs of the business community and Sweden's present relations with the Western world. Other submission bodies argued quite the reverse: we have concentrated far too much on the problems of developing countries.

Since such comments were usually accompanied by discourses about the trade-off that should be struck between the Western and developing world for purposes of internationalizing education, we feel there is cause to point up the significance of Eastern Europe in the global whole. We further underline the importance of an all-rounded and holistic view. In other words, internationalized education should not be seen as a "smorgasbord" of learning to be portioned out in servings calculated to please every ideological and/or geographic palate. Far from it: such education should serve a total global perspective, call dissensions of ideology and power politics by their right names, and make it feasible to take personal stands based on critical analysis.

4 Preprimary, primary and secondary education

The formal reason why we have also taken up schooling (here understood to mean all levels of education below the tertiary) is that it makes the basic building block for internationalizing university education. But first and foremost, of course, internationalizing school education is a goal unto itself. Inasmuch as our terms of reference envisioned the problems of higher education, we shall deal with pre-university education in outline only.

4.1 The preschool

Many of the fundamental attitudes are molded during the first years of life. The preschool should therefore devote greater attention to instilling open and positive international attitudes. We submit that the preschool should be given a strategic role in the efforts to create international solidarity and a sense of world citizenship.

Naturally, not much instruction about international affairs can be given at this stage. It is in respect of the affective goals that the preschool can perform its big mission. The chief targets here are certain fundamental attitudes which have no specific international mooring but nevertheless bear crucially upon the ability to understand what goes on in the world outside: a feeling of tolerance, learning how to work together with others, a sense of individual and collective responsibility, etc. Further, children should be introduced to international subject matter in games, songs, stories, books, pictures and films. Portrayals of children and families from other countries should stress the elements shared in common and not the disparities. The trumpet should not be blown for the homeland in terms that tend to belittle other peoples and cultures.

4.2 The primary and secondary schools

Internationalizing instruction is defined as an important goal in the general guidelines laid down for the Swedish schools. The only trouble is that these statements of public policy have not been satisfactorily realized in the classroom.

Given the pace at which the world is now changing, the lives and futures of the human race will depend on global events in a way that lacks all counterpart in earlier history. The fact that more and more problems will have to be solved by international cooperation does not concern politicians and experts alone. If such solutions are to be feasible at all it will be necessary for each and every citizen to grasp the nature and inescapability of global dependence, to comprehend that national isolation is impossible and to feel international solidarity.

This development confronts the school with a radically new situation. It follows that there can be no question of making only minor changes in or additions to the school's education. What is needed is a profound reorientation, a new approach to the role of education for international collaboration. Whatever the measures taken within the bounds of the possible, education in the primary and secondary schools will still, for the foreseeable future, lag behind the necessary adjustment to a new global situation.

We submit that it is not enough to spell out guiding principles for internationalizing education in the public directives governing instruction at the primary and secondary levels. Such directives are readily perceived to be remote and abstract, as being more honorific than concrete and solid. It will therefore be necessary to revise the syllabuses and directives for instruction in the particular subjects so as to give concrete and pragmatic expression to the interna-

tionalization goals. We call upon the National Swedish Board of Education to implement such a revision of syllabuses and directives on a subject-by-subject basis.

The assimilation of knowledge is meant to instill awareness of different cultures, religions, social systems and economic systems, as well as sympathetic appreciation of values other than those which are common in the homeland. It is meant to convey insights into the global dependencies. In that way the assimilation of knowledge will make fertile soil for the formation of attitudes.

In order to make a thoroughgoing job of internationalizing education, we propose special in-service training towards that end for all schoolteachers (see section 5).

Textbooks and other aids to learning will have to be adapted to an increased internationalization of schooling. To simplify that task we recommend that the National Board of Education enable representatives of the producers of educational material to take part in the in-service training for teachers on internationalizing education. Further, the Board should consider appropriate arrangements for relaying information to textbook writers and producers, as well as the control arrangements to ensure that textbooks are congruent with internationalization goals in the syllabuses.

4.3 Language training in the school

Beginning with the third grade in primary school, all the pupils take English, which means that this language is now studied for at least seven years. As from the seventh grade the pupils may elect to study a second language, French or German, this for three years. About two-thirds of the pupils do so, but in the following years some pupils drop the second language while other pupils pass over to French or German from another elective. The language curriculum in upper secondary school exhibits a complicated picture, with varying emphasis from one line or major to another. Here we shall solely dwell on the main features of the three-year theoretical lines. To begin with, English is mandatory for all pupils throughout. They also study a second and third foreign language. These are usually French and German, but Finnish, Russian, Spanish, Portuguese and Italian are also on

offer; the language program at one secondary school includes Chinese.

Whatever the sequence, every pupil must have studied at least a second and third foreign language at one time or another. However, only about one-fifth of the pupils follow through on a second foreign language to the senior year of secondary, and the same holds true of those who study a third foreign language.

It should also be mentioned that the voluntary adult education associations operate extensive language training programs. In many cases, too, similar opportunities are offered to the employees of large manufacturing firms.

A widely held consensus among universities, employers and educational authorities is that the schools must do a more efficient job of teaching languages. The universities complain about students who try to avoid course literature in English because they find it too hard to read; as for course literature in French and German, it is scarcely considered, let alone read. The employers insist on better knowledge of languages. Moreover, investigations of earlier pupils made several years after school-leaving age show that what they wanted most of all from their formal education was better instruction in foreign languages.

The deficiencies in language training seem to be due to problems bound up with teaching methods and the actual structuring of studies, i.e. the fragmented language program and the options whereby pupils can drop foreign languages at their discretion.

Many people feel that one reason for the deficiencies in language studies is that the so-called unilingual method has enjoyed official sanction over a period of years. Today, however, it seems to be agreed that the contrastive method will have to play a decisive role beginning with the lower level of secondary school (grades 7—9). This means that mastery of mother-tongue structures is made to underpin the training in foreign languages and that points of grammar can be explained in the course of comparisons with the mother tongue.

One difficulty is posed by the varying skill levels of the pupils. Preliminary reports from ongoing experiments with assignment of pupils to instruction groups by skill level suggest that this can lead to efficiency gains. Not least important, the less skilled

pupils can make better progress and become more highly motivated to study languages if they are taught in a more homogeneous group. We submit that the experiments with ability grouping in language instruction be enlarged to furnish evidence that might support the enactment of a general reform.

We emphasize that language training must be geared to the practical ability to communicate in general everyday situations and in the world of work. It follows that there should be no preoccupation with *belles lettres*. Skill in reading nonfiction must be given higher priority than in the past.

In respect of secondary schools the National Board of Education has drafted a reform proposal whereby study of one foreign language in addition to English will be made compulsory in all grades. Further, a third foreign language will be made compulsory for a couple of secondary lines, with provision to include such a language as an elective in most of the other lines.

The proposal is meant to eliminate the fragmenty between two foreign languages (excluding English) in favor of unalloyed commitment to a mandatory second foreign language. Pupils are to be equipped with

decent skills in at least one foreign language other than English; this intention is thwarted by the exercise of options to drop the second and third foreign language under the present system (see above, p. 19). We endorse the guiding principles of this reform proposal.

Taking a longer view, we think efforts should be made to assign more classroom hours to language instruction, especially in the upper secondary natural-science and technology lines. At present these lines devote much fewer hours to foreign languages than the liberal arts line; this is an anomaly considering that the ability to communicate well in a non-native tongue is no less a *sine qua non* for a scientist or engineer.

4.4 The task ahead

The internationalization of schooling is a task that must be pursued with sustained vigor. We therefore call upon the National Board of Education to plan a concerted action program for increased internationalization of primary and secondary education and to appoint a reference group to follow up and develop this action program.

5 In-service training of schoolteachers

5.1 The need for in-service training

The basic education acquired by our schoolteachers has been much too ethnocentric. In Sweden, moreover, the annual increments of newly certified teachers are going to be very limited for a long time to come. To take an example, nearly 80 percent of the subject teachers in lower secondary (grades 7—9) are under 40 years of age and 40 percent are under 30. Hence a very large number of tomorrow's teachers is already educated.

It follows that any internationalization of schooling will above all require investments in the in-service training of teachers.

To all intents and purposes, the resources put at the disposal of such training amount to the following. Of the time that teachers put in on official duties five days a year, known as "study days", are set aside for in-service training. Some of the conference hours that enter into teaching duties can be tapped for in-service training. Members of school management (as personified by principals and senior masters) should also be counted with the in-service training resources. Further, it is assumed that the teachers take such training on their own by reading different kinds of literature to keep abreast of developments. The teachers may also opt to attend centrally mounted (i.e. state-sponsored) courses while on vacation. A great many more teachers want to take these summertime courses than can be accommodated.

Every year several vacation courses are specifically mounted to further the cause of internationalized education. On top of that the National Board of Education and the Swedish International Development Authority have jointly sponsored seminars in developing countries. These have been scheduled on vacation time, and the teach-

ers themselves have had to pay part of the expense. The same holds for organized study tours inside Europe.

In our opinion substantially greater time resources should be made available to in-service training, for the most part during working hours. We think such training is particularly needed to promote internationalized education. Our proposals under this head nevertheless proceed from the present system of in-service training.

We recommend implementing a program on behalf of in-service training over the next few years dedicated to internationalized education, a program that will extend to every schoolteacher. Failing this, all the talk about internationalizing the school will be mostly empty words.

In-service training that is harnessed to internationalizing education will also satisfy other educational goals: the attitudes to other groups, a problem-oriented and inquiring frame of mind, the ability to criticize, empathy, etc.

5.2 The general design of in-service training

Since in-service training must be rooted in the wishes of those directly concerned, priority should be given to the small unit, i.e. to training within each and every school and municipality. To argue the case for this approach even more strongly, in-service training will presuppose discussions and studies plus joint planning both of instruction and other activities in the individual school. In-service training at the local level is also necessary if the present training system is going to reach out to all teachers.

The target group for in-service training consists of all teachers ranging from the preschool to secondary school, all school

managers and all teacher trainers. That comes to a total of about 100,000 persons. To be able to reach all these people and achieve maximum impact, primary resort must be made to training selected key groups in their potential capacity of innovation diffusers. These groups will then act as the vehicles of regional and local diffusion.

It is for these reasons that we propose in-service training in line with a three-step model.

In the *first step*, teams for regional in-service training would be formed upon completion of courses centrally mounted by the National Board of Education. We propose to spread this central training over three years, with voluntary, one-week vacation courses for about 500 persons.

These persons are to be picked out from certain key groups consisting of faculty members at teachers colleges, in-service training consultants from the regional county school boards, principals and directors of studies, etc. During those three years 12 one-week courses would be mounted with 40 participants in each. In that way two of the six in-service training regions into which Sweden is divided, plus one-third of the teachers colleges, would each year be equipped with teams to carry out the in-service training in step 2.

The courses in step 1 may be laid out after the following model:

a) Common seminar part

The global adjustment problem (population, economics, resources, environment).

Ethnocentrism. Sociopsychological and socioanthropological aspects. Normative methods for internationalized teaching.

b) Group work part, divided into levels and subject clusters

Discussion of concrete models for each subject and level.

c) Concluding plenary part

The groups report on their main findings. Joint discussion. Decisions on measures, follow-up and further needs for in-service training.

In the *second step* the working teams that were trained in step 1 would carry out regional training under NBE auspices, partly of all faculty members at teachers colleges, partly of teams for local in-service

training at primary and secondary schools; the latter group is proposed to consist of a bit more than 3,000 persons. The training to be given at teachers colleges would absorb three of the five "study days" earmarked for one year. The teams for local in-service training would qualify by completing voluntary one-week courses while on vacation. The number of such regional courses, each with 40 participants, works out at 80; we suggest they be carried out over a three-year period.

The teams for local in-service training who go through step 2 would consist of four persons from the comprehensive school in each municipality (but more teams from the larger municipalities) plus four persons from every upper secondary school. Different school levels and subjects would have to be represented on each team. In this way every local educational unit will get several leaders of local in-service training who can help to back up one another.

In the *third step*, in-service training would be diffused locally to all teachers; attempts should also be made to reach other school personnel. We suggest two ways of implementing in-service training in the third step: first, it should take at least three of the year's five study days; second, the regular school management should be engaged.

It is impossible to specify when training in the third step will be finally consummated. That is because it is up to the local authorities to decide how the study days are going to be spent. Besides, it is almost futile to push through in-service training on a big scale unless it is anchored in the wishes of teachers. However, the training of teams in steps 1 and 2 should act as a catalyst spurring teacher interest in in-service training of the kind which seeks to internationalize schooling.

The costs of the proposed in-service training will be modest. In respect of steps 1 and 2 the costs are estimated at approximately Skr 4 million. As for step 3, no extra costs will arise over and above those already incurred in connection with the study days.

5.3 Supplementary in-service training

The general program of in-service training described above needs to be amplified with other forms of such training.

Attached to the teachers colleges are so-called pilot and demonstration schools which serve two purposes: as places where prospective teachers practice and where pedagogical experiments take place. We propose providing teachers at these schools with special in-service training in line with a trial-and-error model. It should start off with a symposium of 3—4 days, where the teachers can brainstorm their way towards methods for radically internationalizing the instruction given in various subjects. These methods would then be tried out in the classroom for one year. After that the participants would meet anew to summarize their experiences and discuss necessary changes. The results deemed worthy of passing on might be presented in the form of a simple methodological guide distributed to the teachers.

Mention should also be made of special courses devised for various purposes. Examples: an introduction to social anthropology with emphasis on problems of ethno-

centrism; a course on economic internationalization and multinational companies; a course on the global problems of coordination and allocation; a course on non-western history and non-western cultures viewed from the endogenous aspects. We also propose intensified cooperation with the universities so that teachers are given good opportunities to pass through internationally oriented university courses.

We assume that the foreign seminars will not only stay in being but also expand. Further, we propose a stepped-up program of international contacts initiated by the schools, e.g. in the form of studies taken at different UN agencies, greater use of visiting lecturers from abroad and wider dissemination of international pedagogical literature. We also recommend giving the teachers greater support in their own sustained in-service training, for instance by providing them with educational materials for this purpose.

6 General problems of internationalizing university education

6.1 Introduction

An internationalization of university education cannot be ordered into being from the top, even though central decisions and central support will be necessary. It will have to be pushed ahead by the universities themselves. The most effective controlling and stimulating instrument to help them do so lies in the allocation of resources. If it is felt that internationalization—and other overarching social goals—should determine what the universities do, the inevitable result will be for the community at large to allocate its resources to the university in a direction that will achieve these goals. Public standards and performance auditing are other major controlling instruments. Central measures must be designed so as to promote innovations and activity out in the field. They should cater to the overarching social goals for universities but counteract the inertia, rigidity and the regulation of details which often characterize educational systems.

It has been said that if any more radical educational innovation is contemplated, the attitudes of teachers will have to be changed first; the practical realization of educational change itself then becomes a second step. That statement probably holds with great force for any kind of renewal with an internationalizing thrust. In other words, it will not be enough to change syllabuses, curricula and the like, since such reforms readily tend to stay on paper.

There is a connection between university policy in general and efforts to internationalize education. Internationalization is one example of an area where general measures must be taken to permit the universities to develop and renew themselves more vigorously.

It follows that we could not ignore issues relating to the aims of research and the training of researchers, nor to the innovative

ability of universities and its related problems of organization, resources, management and leadership. Since these issues must also be judged from other aspects, we have been unable to put forward finalized proposals. None the less, we wanted to identify measures that must be taken and problems that must be investigated in regard to university potentials for renewal and change.

6.2 Research

One of the most powerful factors affecting the affairs of universities is the research that goes on inside their walls. An internationalization of research is presumably one of the most efficient instruments that can internationalize education more pervasively in the long run.

The term, "internationalized research", has several different meanings. For instance, it may pertain to research methodology, which may be universally applicable or more nationally limited. Or it may pertain to the content of research, according to whether it is concerned with general problems, international problems, problems in other countries or national problems. It may also pertain to the organization of research: a project can be undertaken within the framework of international research planning and under different forms of international collaboration. Further, provision must be made to publish research findings so as to make them internationally accessible.

Since research bears so crucially upon the renewal of education, the research volume must be substantial as a ratio of the educational volume and the connection between research and education must be guaranteed.

However, this is also a question of the thrust to be imparted to research. Two other government-appointed committees of inquiry recently put forward proposals which aim at giving research a greater inter-

national thrust. The one committee, concerned with development research, wants 5 % of the total Swedish foreign-aid appropriation earmarked to support research in developing countries, training of researchers in such countries, development research in Sweden and participation in internationally sponsored development research.

In our opinion, research into the problems of developing countries has importance beyond the actual research objects and the direct findings. That is because such research will broaden the perspectives of scientific inquiry and bring about a general change in attitudes.

The other governmental committee, concerned with studies of the future, stressed international dependence as an important aspect. This committee has accorded priority to, among other things, global resources, ecology and specific international problems. Among the examples mentioned are climatology, utilization of outer space, utilization of the seas, the production and spread of toxic substances, global population dynamics, intergovernmental organizations and international law, peace and conflict research, international production and world trade, environmental protection and development, and cultural communication.

As we see it the national research councils, whenever more than purely basic research is involved, should regard the national and international relevance of research projects as a major factor for ordering priorities in budgetary policy. The future organization of the national research councils, a matter now being investigated, should be shaped to make it easier to support multidisciplinary projects with an international thrust.

Some of our proposals, such as those calling for the exchange of students and university staff across frontiers, could well be harnessed to promote internationalized research.

The connection between research and education is reciprocal. Thus education that is internationalized can be turned into a determinant of research. To mention a trivial example, there is the educational program we propose which combines business administration and economics with language studies (see p. 39). We should like this program to be largely based on German and

French literature. As a result not only instruction but also research may be expected to become more influenced by developments in the French- and German-speaking states than they are at present.

6.3 Postgraduate studies

The training of researchers is one of the factors that will affect the specialization and attitudes of tomorrow's faculty members and other academic staff. A global perspective should be pointed up in the curricula devised for such training and in their practical application. Further, greater provision should be made to let researcher training benefit from internationally oriented, multidisciplinary courses. Our proposals on international student exchange and on professional and scientific language training aim not least at the postgraduate level. We also recommend increased international co-operation in this area, e.g. by means of field trips, international symposia, engaging the services of foreign university teachers to tutor or give practical guidance, group-by-group study of courses at foreign universities, and researcher training courses attended both by Swedish and foreign undergraduates, planned if possible so as to take advantage of the national backgrounds of the various learner categories.

6.4 Obstacles and stimuli to innovation

6.4.1 *The need for renewal*

An oft-made contention in the international debate on higher education is that the universities find it much too hard to implement profound innovations. The controlling mechanisms and the institutional structures obstruct renewal and change of the kind that dips below the surface; on the whole, they seem to be overly geared to preserving the status quo.

Our task has been to see the need for renewal only in terms of internationalizing education. But even seen generally, the universities are now probably under greater pressures than ever to effect internal change. The world of bygone days in which the universities worked changed with near-imperceptible slowness. Now that changes in the human condition are moving so much faster, university-level education and research are being similarly pressured to

renew themselves. This will matter crucially for the ability of the human race to cope with developments.

6.4.2 *Obstacles to innovations*

The need for renewal to satisfy the internationalization criterion is intimately bound up with other desirable innovative thrusts: problem orientation and interdisciplinarity, consciousness of values and future directions.

Naturally, our discussion of obstacles to innovation and the prospects for removing them is tied to the special rules and regulations under which the Swedish university system is administered. In the present summary, therefore, our discussion will be confined to a general plane.

If educational changes are to be accomplishable by local initiatives, then centrally promulgated regulations must not interfere unnecessarily. Such regulations have to be laid down as a matter of public policy, but they should be amenable to the speediest and simplest amendment possible.

Much of our higher education is centrally controlled on the strength of decisions about basic institutional structures taken by the legislative and executive branches (for Sweden read Parliament and Cabinet, the latter usually spoken of as the Government with a big "G"). The fabric of this system, made up of faculties, subject departments and government-prescribed subject fields, may be likened to a building edifice: once in place, the necessary changes tend to be "cosmetic", while altering the structure itself verges on the impossible. As such, the system may raise obstacles to reorientation to new problem areas and multidisciplinary methods of approach.

In practice, government decisions to set up tenured posts for teachers and researchers within carefully specified disciplines—decisions which in Sweden are largely taken by Parliament—will have binding force for a very long time. But the needs keep changing. The inception of a new university chair may look innovating for the moment. But in another fifty years the same chair will probably still exist, even though the needs will be quite different by then.

The Swedish system of allotting economic resources to the universities, especially to the liberal arts faculties with their unlimited

enrolments, partly works out in practice to impede the adoption of new types of education.

Those central funds which are variable and which can be used to foster innovation consist for the most part of grants made by the national research councils. But it seems likely that the grant-awarding policy of these bodies is determined both by ruling research traditions and their own traditions. The most important variable grant on the university education side is one of SKr 10 million to pay for educational development work (the total costs of higher education and research amount to about SKr 1,800 million). Most of the grant is shared out by means of decisions taken locally; more of the monies seem to be spent on face-lifting the teaching arts than on deeper-going, organic innovations.

Even if the central controlling mechanisms can act to obstruct innovation, it does not necessarily follow that decentralization of decision power will automatically accelerate the rate of innovation. The local controlling mechanisms can also act in the direction of preserving status quo.

A characteristic feature of the Swedish university system seems to be the lack of goal-defined controlling mechanisms such as line management and incentives. Where educational activity is concerned, innovation-fostering incentives are almost entirely absent.

Within each faculty the responsibility for educational planning is vested in a joint faculty-student council. The original intention was to have the council evolve into an engine of change and renewal, but the facts have denied the promise. The joint faculty-student councils deal to a large extent with formalities. Their status vis-a-vis the university departments seems to be weak.

The most powerful controlling factor are the departments. A primary attitude on their part is to defend the private preserve, e.g. as regards the distribution of resources. So a collective defence mechanism takes hold among the joint faculty-student councils and the faculties as the various department heads assiduously back up one another. This tends to lead to defending status quo right across the board.

In an institutional structure that is characterized by the lack of clearly defined

goals, a lack of line management and incentives and no clearly spelled-out system for decision-making, the field is left by default to tradition, the more so since it is not balanced and countervailed by other, effective and goal-defined controlling instruments (or, as the business community would put it, "management by objectives").

6.4.3 Stimulating innovation

A renewal method sometimes used is to create a new and independent initiating mechanism in the form of new, earmarked government appropriations. Considered as a general and permanent model, however, this method is marred by two flaws. First, it leads to constantly growing resource frames ("budget-busting") instead of compelling reordered priorities within existing frames. Second, the innovation effect is short-lived.

Since by far the greater part of grants to the universities is tied down for the relatively long run, it will be necessary to create a variable economic resource which can be used to stimulate innovations in the educational sphere. In our opinion a "free kitty" of this kind ought to be put at the disposal of the Office of the Chancellor, a pool that would not be permanently tied down to specific uses. Following a specified initial phase, a successful innovation could be financed out of the regular appropriations, with priorities to be reordered within these. The released monies could then be invested in a new sector. An appropriation of the type here discussed must not be too small; it should presumably come at the very least to between one and two percent of the total expenditures on higher education and research.

The system of allocating resources for teaching must be designed to eliminate anti-innovative elements. We propose various changes in the special Swedish system.

When new university units have been set up in Sweden they have been made into miniature replicas of the older universities. Other countries have often launched experiments with new types of university structure

and learning. This permits more radical innovations which can then be used where appropriate by the older universities. What about our fairly new branch campus in Linköping: could it not be developed into a Swedish experimental university? We think it's worth a try.

One way to reduce the drawbacks attaching to single-subject focus and hawk-eyed preoccupation with resources on the part of university departments would be to merge a number of allied departments into larger units. Another way is to form project groups which work together across departmental boundary lines. A third way is to augment the subject departments with multi-disciplinary centers.

The local administrative system will have to be developed into an innovative factor instead of acting as a conserving superstructure for defending the resources of subject departments.

Indeed, every effort should be made to build pro-innovative stimuli into the university system. Among other things, demonstrated ability to innovate in education should count towards career advancement. It should be feasible to organize the in-service training of university teaching staffs so as to intermesh it with the quest for educational change and renewal.

The teachers are not the only ones who need to be innovation-motivated. Members of the student body should also be allowed to take an active part in the innovation processes, with a view to giving them influence over and a sense of responsibility for educational renewal.

Systematic evaluation and performance auditing, in both cases devised to accord due credit to the qualitative and innovative aspects, are needed to provide inputs to a sustained renewal of education for its thrust and content.

We propose that the Office of the Chancellor prepare a plan for undertaking investigations and recommending measures which seek to increase the universities' propensity and ability to innovate.

7 Internationalizing the content of university education

7.1 General questions

We attach the highest priority to a general internationalization of all university education. Specialized international studies are also needed, not only to meet the demands of the job world but also because of their potential effects on research, researcher training and university education otherwise. In earlier reports we submitted proposals for internationally oriented special courses; these are set out in section 7.7.5—7.7.9. They serve an important purpose, as in recurrent or continuing education. However, courses of this kind must not excuse us from tackling the much harder but also more important task of internationalizing all university studies.

Generally speaking, educational programs should not be established which focus on international service only. None the less, we have proposed an educational program in international business administration and economics; see section 7.7.9. As a general rule, however, education which is adapted to internationally oriented labor market needs should enable the undergraduates to choose between imparting a more distinctive international profile to a program (through alternative courses of study and components of internationally oriented special courses) or building upon a degree with specialized international studies.

When it comes to the general internationalization of the normal university courses, we present models and typical examples hereon. In the selection of typical examples we have emphasized those subjects which correspond to the academic subjects taught in secondary schools and thus form part of the teacher training.

Internationally oriented theme courses

One method of generally internationalizing all educational programs is to introduce, as

an adjunct to the subject studies, what we describe as internationally oriented theme courses. We put forward proposals for two types of such courses.

The one is a brief, introductory survey or orientational course providing for three points of academic credit (equal to three weeks of study), which we call "Interdisciplinary University Orientation". Our longer-run aim is to make this course a mandatory introduction to all university studies. To begin with it should be offered voluntarily in the guise of an experiment.

The course is meant to give an interdisciplinary orientation to the function of universities in different societies, to describe in outline the relations between people and groups of people in the international society, to instill awareness of and impart some insight into the global problems and to bring out the significance of the specialized sciences in efforts to solve global problems.

One reason for casting the course in this mold stems from the fact that among students one may run across ignorance and misconceptions about the universities' function in society, about the work going on elsewhere within their university and about how their own subject studies can conceivably relate to something that is called research. Seldom do undergraduates feel that they pursue their studies inside an environment where the most cardinal of all questions is, "How does one create new knowledge?" Even less do they get to feel, right from the beginning, how answers to that question are constantly forthcoming from the many-sided teamwork of the international research community. The international outlooks on university morphology and functions which this course provides should make it more natural to perceive every kind of undergraduate education as an integral part of the larger learning and

research wholes. And what is probably the most important social change of our times is the emergence of an international society with problems that have to be solved in collaboration. The undergraduates should see their university studies against this background from the very outset.

The following four topics are proposed to comprise the course:

- 1) The university: origin, organization, function. Hereunder the foundations of science: the search for truth, freedom of thought, incorruptibility, experimentation, the faculty of observation, the testing and viability of hypotheses. For further discussion: the society-criticizing function of the universities and their role in renewing the ideas on which society is based, as well as the risk of conserving prevalent notions.
- 2) The global society. This topic is to give a conspectus on political, economic and religious systems. For further discussion: (example) factors determining the origin and development of international structures.
- 3) Functioning and survival problems of the global society. This topic is to consider the "global crisis" concept, with reference made to the ecological crisis, population problems, the resources crisis, problems of allocation or "fair shares", problems bound up with the arms race, etc. Obviously, it is not possible to "treat" (in the ordinary academic sense of this word) the extremely intricate functioning and survival problems of the global society during an introductory course as short as the one here in question. Be that as it may, it should be feasible to inject life into the problem areas with fairly modest means. By pitting different kinds of controversial perceptions against one another, one can instill an all-round problem awareness and open the door onto the international perspectives.
- 4) The role of particular sciences in the global society. This topic is to consider, say, how one's own science depends on cooperating with other sciences. Examples are to be given of research-based contributions from discrete sciences towards explaining global problems. The topic content should be adapted to each individualized learning approach. The

presentation should be concrete and fairly simple.

We think the course should accomplish a study-stimulating run-up to every educational program in that the studies will be put into a larger picture right from the start, and in that sympathetic appreciation will be created for what science and higher education are all about and what they really amount to in a world whose different parts are destined to become more and more interdependent. The students should be clear in their minds about how the universities form one part of society and of an international scientific community.

The other type of course we propose subsumes thematic continuation courses, which would be scheduled at the end of the studies. We present one example of such a course, called "Human Ecology". It confers 10 credit points (equal to ten weeks of study). It is meant to hold the human condition up to the light of interdisciplinary findings.

This course is proposed to consist of three parts:

- 1) Limitations to human activity. This part seeks to orient students to Man's place in time and space. Among other things, it deals with the factors determining the origin and perpetuation of life, the physical and biological conditions governing human activity, the earth's energy metabolism and fundamental ecological relationships.
- 2) Variations in human culture. This part seeks to give some idea of the rich variation in human culture throughout the course of history. Various socio-economic systems and cultures are to be described stressing their connections with the surrounding environment. Examples are to be taken from cultures totally unrelated in time and space.
- 3) Problems and possibilities in the present and future. This part seeks to bring both these time dimensions under a global perspective. Among other things, it is to consider the usage of material and cultural resources, the inequitable distribution of economic and social welfare within and between nations, and various global problems. It is to conclude with an examination of Man's possibilities of

choosing his future and the bearing that value judgments have upon that choice.

Organizing studies

Internationalizing education is not the only reason why undergraduates in different fields of study need to be provided with elements of subject matter which essentially derive from outside the core subject. One of the targets that future reforms of the study organization should aim at is to have virtually all educational programs contain the equivalent of about one term to accommodate studies other than those which make up the program core. To take a few examples, studies of this kind could be problem-oriented and multidisciplinary, give possibilities for training of professional and scientific languages, or include courses given by other faculties and professional schools.

Some programs have already catered to this desideratum. In other cases the only way to satisfy it will be to prolong study time. Be that as it may, we submit some proposals that are meant to realize and expand these discussed possibilities in the here and now.

7.2 The training of school teachers

Our exposition under this head will be confined to the training given at teachers colleges. The subject specialization that prospective secondary school teachers receive as part of their undergraduate education at the universities will be considered under each discipline.

Today, the undergraduate education of teachers does not adequately live up to the goals that have been formulated for internationalizing education in the schools (primary and secondary). Investigations show that the vast majority of teacher-candidates think greater provision should be made for international perspectives in their training than is now the case.

The Swedish Ministry of Education and Cultural Affairs recently appointed a committee which is called upon to draft proposals for changing all kinds of teacher training. According to the terms of reference for this committee, attention should also be given to changes to allow for the internationalization parameter.

However, an inquiry as all-embracing as this is going to take time. The international-

ization of teacher training is a mission of the utmost urgency. We therefore think it should be feasible to phase in a series of measures without having to await the results of this investigation.

It follows that in-service training ought to be arranged for the staff of teachers colleges pursuant to our proposal in section 5. Further, the curricula in force for the training of prospective teachers at the preschool and primary school should be overhauled so as to bring them better in line with the internationalization aspects. The same holds for the curricula governing the didactic ("practical pedagogy") courses that have to be passed by prospective secondary school teachers. For that purpose links should be forged with those changes in the university undergraduate programs which we discuss in the following sections.

7.3 Religion

The program under which the theological faculties prepare clergymen for service with the established church and qualify students to teach religion in the schools was recently reformed. One effect of the reform is to broaden the program in an international direction. The program concludes with thematic studies running for one term, and during these advantage should be taken of the opportunities to apply an international perspective. Not only that, but the theological faculties should also weigh the merits of instituting special courses on non-European religions.

In addition, we should like to bring up the question of letting institutions outside the theological faculties incorporate more elements of religious science in their programs. Awareness of shifting religious and associated beliefs plus respect for them is basic to international understanding and collaboration, often also for communication on the international plane. In a country as relatively secularized as Sweden it lies ready to hand to belittle the importance of religious factors and to look upon religiously conditioned phenomena with an ethnocentric lack of sympathy and respect. To offset such an unknowing and uncomprehending attitude, the facts of religion need to be illuminated in several different kinds of university education. What we have in

mind here are such things as training teachers in subjects like history, civics and biology, as well as specialized international studies.

7.4 Law

Since the legal systems of countries especially bear the national imprint, this fact inevitably rubs off on the education of law students. Nevertheless, all the persons who are going to practice this profession, whether they serve as judges, magistrates, attorneys, barristers, solicitors or whatever (we shall simply call all of them "lawyers") will have to absorb an international perspective, and this for two reasons.

The one reason is that tomorrow's lawyers should learn to look critically at the connection between the rule of law on the one hand and, on the other hand, other societal structures together with political, social, cultural and religious values. The best way to achieve this enlarged, critical perspective is to give the undergraduates insights into legal systems and their origins in surrounding structures not only in Western Europe but also outside.

The second reason flows from the internationalization process, which will put more and more practicing lawyers into touch with foreign citizens who entertain other ideas of justice and value judgements, as well as with foreign and international conditions and rules of law. As a matter of course, not all lawyers can specialize in the foreign and international aspects of these matters. But they ought to have enough knowledge and insight to understand why and how these rules and notions can deviate from those current in Sweden; further, they should be able to know how to go about searching for information on foreign and international law.

Looking longer term, we think the education of lawyers needs more or less drastic revision: there should be less emphasis on detailed knowledge of Swedish jurisprudence and more on problem-solving which incorporates international aspects. In order to spark off even now an evolution towards this end, we put forward certain proposals.

The training of law students should start off with an introductory course that works in material from "Interdisciplinary University Orientation", the course we proposed

in section 7.1. It should contain an orienting outlook on legal systems in a global perspective and on their interplay with other systems. Further, it should provide a basis of facts about legal institutions in our country and (synoptically) in other countries and about the methods governing judicial settlements. It should illuminate the role of legal science in social change and its interplay with other sciences. Among other things, an introductory course of this kind would enable the undergraduates to understand where their studies fit into the larger picture and thus spur their motivation from the outset.

In addition, we propose to have the study of component subjects adopt an international perspective throughout, this to get away from parochial concentration on Swedish codes of law. In that connection practical guidance should also be furnished on the art of retrieving information about foreign and international legal relationships.

Moreover, we would like to see more academic time devoted to the study of international law.

Some law students will need to specialize in foreign and international legal relationships. This they can do in two ways: (1) by taking electives during their undergraduate years; and (2) by taking supplementary courses after they graduate. By way of exemplifying courses of this kind which should be initiated, we can mention export law, comparative law, international market law, ideological and political aspects of the civil law, alien law, war and deterrents to war, development of the legal system, admiralty law, law of the sea and space law.

7.5 Languages

Under this head we shall consider the training of prospective language teachers and other language specialists. The training of other student categories in the language of specific subjects or professions will be dealt with in section 8.

Instruction in English in primary school is conducted by the ordinary homeroom or class teachers, who receive no more than shortish training for this purpose. Language training at the secondary levels is conducted by university-educated subject teachers; to qualify for a degree, the minimum they must satisfy is 40 points (one year

of studies) in each language. Every teacher instructs in two or three languages. The universities have let it be known that they would like the undergraduate period prolonged.

Although we endorse these wishes in principle, we think it better to await the outcomes of ongoing experiments to render training more effective within the present timeable. In our opinion the most urgent task will be to strengthen the training in English for primary school teachers (grades 1—6). We further propose to have the National Board of Education investigate the merits of letting language teachers undergo in-service training on a systematic basis.

In principle we recommend that one segment of the training for prospective language teachers be mandatorily located in a country where the language is spoken. A pilot scheme for this purpose should be put into effect immediately.

The question of training interpreters is now being investigated by an ad hoc committee within the Office of the Chancellor. It would also be desirable to inquire into the need for training translators.

7.6 Humanities

As was mentioned in section 7.1, we picked out certain subjects to serve as models and typical examples of how to go about internationalizing university education, since for self-evident reasons we could not submit proposals covering every single course of study. Our models and examples should be able to offer guidance to the policy that ought to govern curriculum reform in other disciplines as well.

7.6.1 Swedish

Primary and secondary schooling in the subject of Swedish has two referents: proficiency in the Swedish language and knowledge of Swedish and foreign literature. The prospective secondary school teachers take Swedish as a so-called "block subject" at the universities (to qualify for their credentials, they must amass 60 points, equivalent to one-and-a-half years of study). The respective academic departments in charge of Nordic languages and of literature are jointly responsible for this teacher training in the block subject, Swedish.

Swedish is one of the most important subjects in the school for internationalizing education. First, this subject holds the key in efforts to counteract cultural ethnocentrism, to arouse a sympathetic response to the values of what other civilizations have created and to build up the sense of world citizenship, which we see as the nucleus of internationalized education. Second, Swedish is the subject through which education can be chiefly internationalized on the basis of vocational-technical lines in the secondary school.

The European and Western ethnocentrism in the universities' block subject, Swedish, poses an obstacle to internationalizing education in the schools. Hence perspectives must be made to shift, and no little at that. We propose to have this done according to the following guidelines.

From the internationalization aspect, Swedish instruction in the schools must satisfy two minimum criteria:

- 1) It should remove the notion that the three continents of Asia, Africa and Latin America—where a majority of the earth's population lives—are big blank spots on the literary map.
- 2) It should create respect and understanding for literary products which emanate from any non-Western civilization, and seek to eliminate notions that Western culture and literature are obviously "superior" to or more "elevated" than other cultures and literatures.

In other words, this is more a matter of embracing a philosophy, an attitude, than of learning fixed quanta of information.

At the very least, the following consequences will flow for university programs of teacher training in Swedish:

- 1) It should mandatorily contain some orientation to the functions and expression modes of literature in so-called primitive cultures, to the ethnocentric problems bound up with the subjective experience of literature, and to the problem posed by viewing literature in a "culture-imperialist" light.
- 2) It should mandatorily contain some orientation to as well as directions on voluntary reading of the older and newer literary works of Asia, Africa and Latin America.

- 3) It should mandatorily and to the greatest extent possible integrate global perspectives (ergo not only European) into all kinds of literature teaching.
- 4) It should offer opportunities for optional choice of internationally oriented courses; however, this must not be seen as a substitute for the mandatory topics set out above.

Scope for these changes should be provided at the partial expense of older Swedish literature. If necessary, some curtailment of scope can also be effected for the history of language, linguistic geography, linguistic sociology, Danish and Norwegian.

An ad hoc committee within the Office of the Chancellor is now working on an overhaul of the curricula in the block subject of Swedish taught at university level. We submit that this committee should bear our viewpoints in mind.

7.6.2 History

History is an important school subject from the internationalization aspect; it can become an instrument to help us get away from one-sided national and Western European perspectives.

The men and women who teach history in the schools take it as a block subject at the universities. It is chiefly composed of topics taken from the subjects of history and economic history, but it also includes Nordic archeology, the history of science and learning, ecclesiastical history and history of the fine arts. Schoolteaching credentials for secondary school are based on amassing 40 points (one year of study).

In the course of examining the curricula in history we have found that increasing their internationalization intertwines with the problem of bringing about greater integration of those different subjects that go into the making of history as a block subject.

Considering how history is taught in the schools, with its piecemeal servings of epoch by epoch, the inevitable result is a picture that is very much Europe-centered. For instance, knowledge of the Middle Ages, the Renaissance and the era of absolute monarchies is said to be indispensable. But the concept of Middle Ages is hard to apply to history outside Europe; as for the "Renaissance" and the "era of absolute mon-

archies", they are totally useless for that purpose. Not until after 1945 does the frame take on global dimensions. But this does injustice to other civilizations. If the non-European cultures and peoples are going to be studied with reference to their own antecedents, one must be prepared to take off from the dawn of history and not put off entry into area studies until other civilizations have made many indigenous cultural elements difficult to recognize. This implies an unfortunate concession to the notion that the history of non-European cultures is interesting only when their contacts with the Europeans turn brisk.

If the school's teaching of history is to impart a global perspective to the whole of history, it will also be necessary to change the university training of teachers in this subject.

Since most of the university-level instruction in history as a block subject is handled by separate departments of history and economic history, the social-history and cultural-history aspects will be neglected. This is particularly unfortunate from the internationalization aspect. In the real world there are no such things as an ordained "politico-historic" or "economic-historic" reality, and to disintegrate the subject will therefore only make the task of training the students to think analytically more difficult.

Many of the textbooks used in the universities are dominated by Western European or Anglo-Saxon myopias. The non-European areas also tend to get marginal treatment in the classroom.

We now put forward a proposal for a more integrated course of study with global perspective. However, any idea of spreading out facts and problems about continents and countries with even thickness among all chronological courses is impossible. We therefore recommend a course that is structured in line with a modular system, where certain modules are mandatory and others not. The merits of this proposal should be weighed by an ad hoc committee within the Office of the Chancellor empowered to overhaul the history curriculum.

According to our proposal the course of study is supposed to consist of five groups. Within each of the groups a student can choose between different parts ("sub-courses"), with every such part to confer

four points, and in that way he can amass 40 points.

Our proposal (the subcourses are to be seen as examples only) looks like this:

Group 1

Choose 2—6 of the following subcourses. Alternatives e) and f) are mandatory.

- a) Universal history before 1750
- b) Universal history after 1750
- c) Nordic history before 1800
- d) Nordic history after 1800
- e) Practice course in historiography
- f) Written assignment

Group 2

Choose 1—4 of the following subcourses:

- a) History of the United States
- b) History of Africa
- c) History of Latin America
- d) History of Asia
- e) History of China
- f) History of India
- g) Ancient history
- h) Medieval history
- i) History of modern Europe

Group 3

Choose 1—4 of the following subcourses:

- a) Comparative history of agronomy
- b) History of technology
- c) The arts as a mirror of time
- d) Comparative social history
- e) Economic growth processes
- f) Comparative demographic history
- g) History of the international capital movements

Group 4

Choose 1—4 of the following subcourses:

- a) History of science and learning
- b) Marxist historiography
- c) History of historiography
- d) Models as historiographical aids
- e) Archival science

f) History of opinions

g) Documentation on international history

Group 5

Choose 1—4 of the following subcourses:

- a) History of slavery
- b) History of the European working class
- c) History of migrations
- d) History of international organizations
- e) Modern international politics
- g) History of the peace movement
- h) Environmental problems in history

7.6.3. History of art

Today's courses of study in art history are imbued with a Eurocentric approach. We put forward a new proposal covering studies during the first year, with one course for each term.

Our proposal seeks to impart a global perspective to this field and to put stronger stress on the connection between art and the societal structures. Even though the proposal may seem to be chronological, it is not that; on the contrary, it is systematic and our ambition has been to break with prevalent chronological patterns and to point up the parallelism in different culture-manifestations.

Even though internationalizing the studies is a goal unto itself, it also fulfills other aims. It functions as a correlate in the study of Western art. It contributes to a shift of attitudes; it will no longer be just as easy to let oneself be hypnotized by developments in a single society and—often—by an articulate class in that society. The international material is meant to stimulate and enrich, above all for methodological purposes. It should give the students new angles of approach and some unaccustomed values.

Our proposal for a 20-point course during the first term is structured as follows:

1 Introduction. Art in tribal communities and rudimentary societies (3 points)

Paleolithic and neolithic cultures. Sub-Saharan Africa. Oceania. Pre-Columbian America.

2 Art in the societies of antiquity (3 points)

Egypt and Mesopotamia. Aegean civilisation. The Greek city-states. Hellenism. The

Roman Empire. The early Christian congregations.

3 Art in feudal societies (4 points)

Volkerwanderung and medieval Europe up to about 1400. Islamic civilization. Feudalistic societies in India, China and Japan.

4 Art in preindustrial Europe (5 points)

The time from the 15th century up to and including the mid-18th century in Europe together with contemporary colonial art.

5 Art in the industrial society (5 points)

The time from the late 18th century up to the present in capitalist and socialist industrial societies.

Our proposal for the second-term course (also 20 point) looks like this:

1 In-depth course in the visual arts (7 points)

Examples of aspects that may be taken up:

Material prerequisites and techniques of the visual arts.

The artistic conception and its study.

Pictorial imagery. Chromatics. Theory of visual composition.

Problems specific to sculpture.

Methods of penetrating the picture's message. The iconography of sacred and profane art.

Instinctive and expressive artistic manifestation.

The abstract, the nonfigurative and the absolute in art.

The picture as a propaganda weapon. Advertising.

Diffusion and study of the visual arts. Art dealers. museums, art criticism.

Mass production in the visual arts. Salon art, prints, cheap art, photography, graphic art.

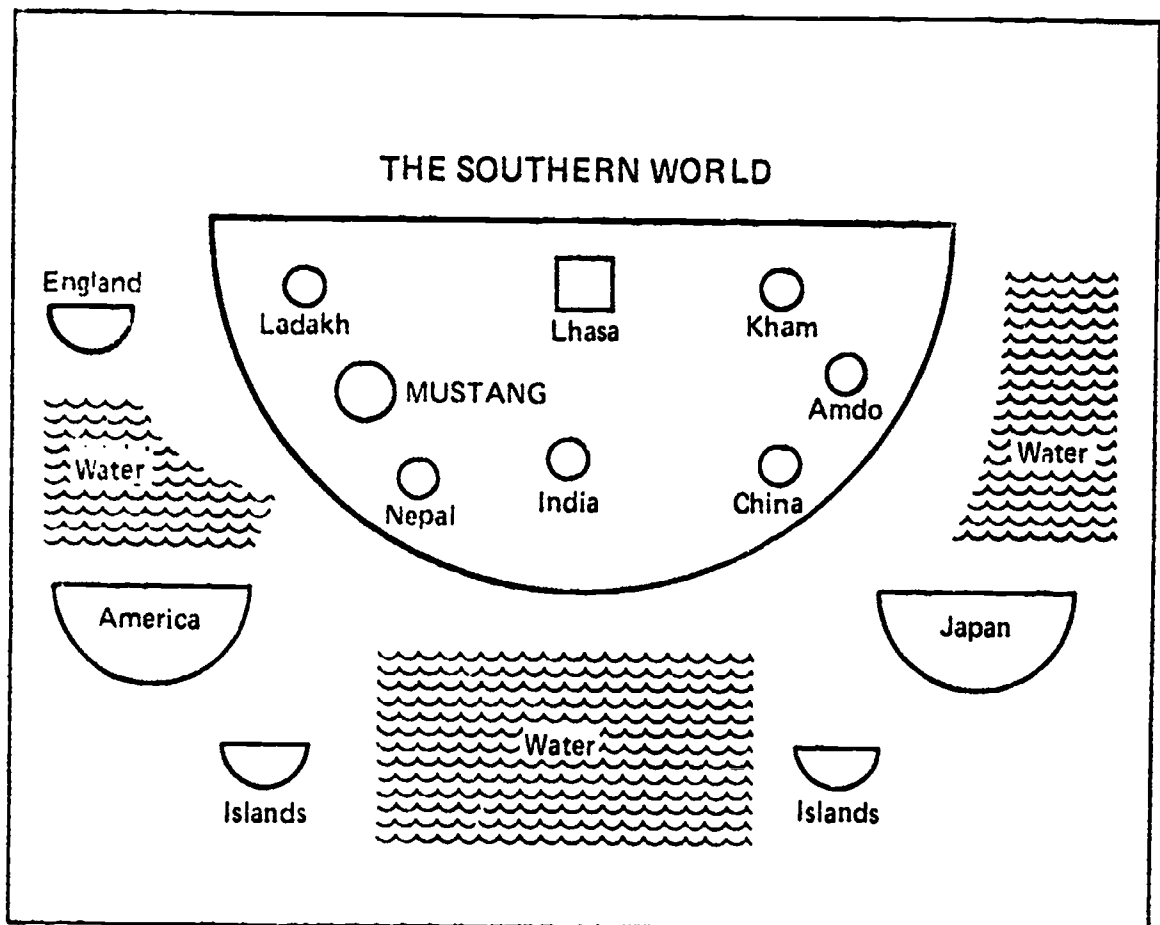
Art in the public setting. Monumental art.

2 In-depth course in architecture, urbanism and utilitarian art (10 points)

Examples of aspects that may be taken up:

Materials, techniques, local prerequisites

Production patterns. Work organization.



Forms of expression. The building as messenger.

Theory of architecture.

Function of buildings (institutions, establishments, dwellinghouses etc.).

Types of plans.

Urban planning/civic design. Utopias.

The residential and working environment.

The industrial environment.

Preservation of buildings and landmarks.

Utilitarian art. Design.

3 Assignment (3 points)

Assignment of a theoretical or practical nature. Orientation to bibliography and archival science in connection with the assignment.

The more detailed format of this course will naturally depend on the literature selected for it. By way of example, we mention George Rowley's "Principles of Chinese Painting" and Amos Rapoport's "House Form and Culture". Rowley's book is studied in two contexts, the first time to learn about the formal qualities of Chinese painting and the second time to explain choice of motifs and substantive aspects. Rapoport's book can usher in the architectural course and should start out by directing student attentions to those sociocultural, climatological and other elementary factors which determine most building and construction throughout the world.

Some people will argue that the study of foreign cultures should not be undertaken in the very first semester of an art history program but that it be put off until later. We do not agree with this view, and we explain why with an example taken from the tiny land of Mustang, whose picture of the world can be squeezed into a simple diagram (page 35).

The universities must not adhere to such a model in their curriculum design.

7.7 The social sciences

7.7.1 General viewpoints

According to a commonly received notion, the methods and theories of the social science disciplines are bound to be international by their very nature because of their

blanket coverage. But in our opinion that does not hold true of all theories and models. Besides, their application will depend on differences in surrounding environments.

If an international perspective is to become more all-embracing in the social sciences, more of them will have to subdue the Anglo-Saxon dominance in respect of models, theories and applications. Towards that end it will be necessary to broaden the international contacts of the social science departments.

Concerning the social science disciplines we have put forward proposals under various heads as follows: (a) models and typical examples for internationalizing the studies in civics and political economy; (b) internationally oriented special courses; (c) an educational program combining business administration and economics with language training. Some of these proposals have an interdisciplinary format, with inclusion of material from fields of study other than the social sciences.

7.7.2 Civics

The subject of civics as taught in the primary and secondary schools carries patent weight for purposes of internationalizing education at these levels. We therefore deem it imperative for the universities to internationalize the training they give to teachers in this subject.

Prospective teachers take civics as a block subject within the universities. To qualify for position at the lower level of secondary school, they must amass 40 points of university credit (one year of study). The block is made up of sociology, economics and political science. To qualify for positions in the upper secondary schools, the teachers must amass 20 more points, which involves additional studies mainly consisting of economics and human geography.

As was noted above in the case of history (see section 7.6.2), university education in civics cannot be internationalized unless the different component subjects are integrated with a problem-solving and interdisciplinary approach.

The reasons are not hard to find. Under the present 40-points system, society is first studied from a sociological standpoint, then from a political science standpoint and lastly from a political economy standpoint. In

other words, the course describes and analyzes the world as though it consisted of three independent segments: sociology, political science and economics. It should be feasible to inculcate a more sensible conception of the real world (and save no little time, with added efficiency in the bargain) if a problem area based on the contributions of different sciences were to be treated in one go. This would also facilitate an internationalization of the studies.

We put forward a conceptual design plan for the first year's university studies in civics, with the following principal aims:

- a) to schedule and merge elements from different sciences more rationally than in existing curricula (structuring around the theme or problem areas);
- b) to put more of a genetic perspective on societal phenomena (which far from lessening the pivotal weight of current affairs is meant to impart greater understanding of such affairs);
- c) to treat the problems of society to a greater extent in a global perspective.

Our conceptual plan is laid out as follows. On an average, just about 7 points will attach to every subcourse (7 weeks of study); other scoring provision can be made, of course. Examples of disciplines that can contribute to the different topics of the integrated study course are stated in parentheses.

Subcourse 1 Man-family-group-society

The formation of societies; individuals and groups in primitive societies (economic history, social anthropology). The structure of industrial production and its impact on individual-group relations (economic history, sociology). Social relations and attitudes; social persuasion processes and opinion molding in the industrial society (sociology, law).

Subcourse 2 The allocation of resources

Normative problems in resources allocation; different production systems and their societal consequences, division of labor and wage determination (economics, political science). The allocation of welfare, nationally and globally; the situation of developing countries (economics, political science, human geography). Equalizing welfare; development cooperation, taxation systems,

social welfare policy, public services (economics, political science).

Subcourse 3 Man and the labor market

The process of choosing studies and careers and its connection with education and the labor market (sociology). Trade unions, employer associations, collective bargaining and rules of law (political science, law). Business cycles, economic policy and manpower policy (economics, political science).

Subcourse 4 Systems of government

From small villages to large municipalities (history, economic history, political science). From royal power and feudalism to modern democracy (history, political science). The political ideologies (political science). The Swedish political system in comparative light; public administration (political science, sociology).

Subcourse 5 The internationalization process

Global adjustment problems—resources, environment, population etc. (economics, human geography). International trade, the economy's internationalization, economic integration (economics, business administration). International political relations and systems; political relations and systems; political consequences of the internationalization process; problems of peace and conflict (political science).

Subcourse 6 Problem study within chosen field

Individual or group work centering on a problem chosen from the course of study, which is to be treated from an all-round social science aspect. May be presented in lectures, memoranda or essays. Practical guidance which gives training in information retrieval and research methodology.

7.7.3 Economics

Economics is founded on certain general basic theories and has traditionally devoted special interest to the international scene. For that reason there would appear to be less need to increase the internationalization of curricula than in many other subjects. But that is precisely why we have deemed it relevant to find out whether this can be increased even more.

The first year of studies in economics should be internationalized to a greater extent by illustrating central economic theory with examples and applications taken from different countries and unlike economic systems. The means toward that end would be to select appropriate course literature, to construct practice exercises and to recast the teaching format itself. We propose minor amendments to the core curricula laid down by the Office of the Chancellor so as to bring out this point and to ensure that stress is put on the international economic dependence.

Students should also be enabled to choose an alternative curriculum, focusing on international economics, beginning with the second semester. Such options should also be available to them after they complete the first year. In addition, we discuss instituting an educational program which emphasizes political economy and which permits specializing either in development theory and developing-country problems or in international economics.

7.7.4 Peace and conflict theory

Up to now the sole provision for studies in peace and conflict research made at undergraduate level has taken the form of minor courses studied within the ambit of political science and sociology. We propose a 20-point course (one semester of study) in peace and conflict theory.

This program would consist of five subcourses: peace theory and peace values, global structure, national structure, Man in the structure and case studies on the problems of peace.

7.7.5 Area studies on Latin America and Eastern Europe

Special courses of the area-studies type formerly did not exist at the Swedish universities. We have proposed the adoption of such studies at the undergraduate level in respect of (a) social science relating to Latin America and (b) social science relating to the countries of Eastern Europe, i.e. the Soviet bloc, which we shall refer to as "EE social science".

Concerning social science relating to Latin America, we propose a basic 20-point course. However, the undergraduates should

also be enabled to study parts of this course separately. The course is to give a conspectus of natural resources, political, economic and social structures in an international perspective, development problems and practical guidance in information retrieval. Half the course would consist of special studies shaped in deference to the interests shown by the undergraduates. Among other things, the course would be called upon to convey an idea of how the Latin Americans themselves view their social problems, the better to militate against ethnocentric misconceptions.

Concerning EE social science, we propose two types of study courses: the one to consist of two 10-point courses without language studies, the other of two 20-point courses in which half the studying time is devoted to the Russian language.

The first 10-point course comprises the following subcourses: an introduction to social conditions in the Soviet Union; geography of the Soviet Union and the rest of Eastern Europe; history of the Soviet Union and other EE states; ideology (Marxism-Leninism) and current EE issues. In the second, follow-on 10-point course, any three of the following subcourses could be chosen: the Soviet economy, with particular reference to dirigisme; Soviet industry and commerce; Soviet politics; Soviet cultural policy, Soviet research and science policy; the economies of EE countries, aspects of dirigisme and government policy; special study of a selected EE country; current EE issues.

The social science content of the with-language courses is the same as for the courses described above. Inasmuch as the language study will be laid out in line with the principles we account for in section 8, we also figure on beginners being able to acquire a useful grasp of Russian even though the studying periods are as short as 10 and 20 weeks, respectively.

These proposals were put forward in our preliminary report I and were put into effect as from the 1973/74 academic year. The Latin America course is given at the University of Stockholm in conjunction with the Latin American Institute, while the EE political science course is given at the University of Uppsala in conjunction with its department for EE research. However, the with-language courses will not start to run until the 1974/75 academic year.

7.7.6 *International relations*

At the undergraduate level we have proposed a 20-point course on international relations, a term that we interpret very broadly to include not only governmental policy on foreign affairs but also the total system of global interdependence, with its interplay of the economic and technological, the development problems and the ecological problems.

Hereunder three subcourses: the first is to deal with the international society in a historic perspective (4 points). That society would be analyzed for its origin, structure and development tendencies, the disparate social conditions in the industrialized countries of East and West and in the developing world, and dissensions within and between these groups.

The second subcourse is to deal with problems in the international society: theories, actors and strategies (12 points). Hereunder the following topics are to be taken up: problems of peace and war; problems of development and allocation; and ecological problems. Stress is to be put on how different actors in the international society react to these problems and which strategies they use to solve them.

The third subcourse consists of case studies (4 points). Here the undergraduate would apply the subject matter learned from preceding courses to concrete international situations.

This course of study was proposed in our preliminary report IV and may be put into effect as from the 1975 spring term.

7.7.7 *International integration*

Our proposal for a course of study on international integration (20 points) takes economic integration as its benchmark, but it also defers to the political aspects of systems such as the EEC, Comecon, EFTA, Gatt and the UN. The course derives its principal content from economics, political science and law.

Four subcourses would enter in as follows: history and prime movers of international integration (2 points); theory of international integration (political, economic and legal theory, 6 points); institutions of international integration (2 points); case studies (10 points).

The overall course could also be taken for

10 points, in which instance the case studies would be dropped.

This course was likewise proposed in our preliminary report IV and may be put into effect as from the 1975 spring term.

7.7.8 *International organizations; international cooperation and conference technique*

The course proposed hereunder, cast in the form of a workshop, is chiefly addressed to those employees in the public and private sectors who come into contact with matters of international cooperation. Although 10 points of credit are envisioned for the course as a whole, its constituent subcourses could also be studied separately or in different combinations.

The "workshop" we have in mind consists of the following subcourses: international organizations (3 points), international conferences and meetings (2 points), case studies (3 points) and conference language (2 points).

The proposal for this course was spelled out in preliminary report IV. It was welcomed by those submission bodies representing the job world, who pointed out that there is great need for such a course. The universities commented adversely, however, mostly on grounds that any course which smacks of a workshop does not properly belong to an academic setting. It is therefore uncertain whether the course will come into being.

7.7.9 *Educational program in economics, business administration and languages (international business economists training)*

In our report II we proposed a new educational program, combining training in economics, business administration and foreign languages to satisfy the needs primarily of Sweden's exporting industries but also of the civil service and other organs of government. This would mean a combination of economics and language training comprising 140 points; that is, a study period of 3 1/2 years. The program format is set out in the diagram on page 40.

This type of education is conducive to internationalization in many ways. The introductory course in economics includes international economic orientation (from the viewpoint of global allocation of welfare and other global problems), a survey of the eco-

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First year		Second year	
Autumn term	Spring term	Autumn term	Spring term
English	Political economy	Language II	Language II
Introductory course in economics		Optional subject	Business administration

Third year		Fourth year
Autumn term	Spring term	Autumn term
Language II	Language II	Business administration
Business administration	Business administration	

conomic ties of Swedish business and an introduction to statistical methods. The optional subject may be English, statistics, a general course in law or international politics. Not only are the language and economics subjects to be studied in parallel, but they are also meant to be integrated with each other. The study of economics would devote more time than usual to foreign conditions and international problems. To the utmost extent possible, the study literature in these subjects should be in English or Language II, and the same goes for the writing of essays and papers. The language training is to provide good, general ability but is also to be directed toward the social sciences and economics. Language II may be French, German, Spanish, Russian or Portuguese.

This program got under way at four Swedish universities in the 1973/74 academic year. It was initiated in Uppsala and Göteborg with French as Language II and in Lund and Linköping with German as Language II. The inclusion of Spanish, Russian and Portuguese as Language II is still a problem of if and when.

First-year experiences of the new program were highly favorable. Studies in economics, macro and micro, used to start off with one term in statistics. That turned out to bring problems in its train: the students at this stage could not fathom the usefulness of theoretical and abstract statistical studies and their connection with the coming subject studies; dropouts used to be numerous. To-

day, the students have reacted most favorably to starting off with a globally oriented, introductory course in economics; they feel they have learned something essential and been given a stimulating run-up to the follow-on studies because these are put into a larger context (cf. the proposal in section 7.1 for the introductory course called "Interdisciplinary University Orientation").

7.8 Natural sciences

The ingredients of the faculty of science are, first, subjects which basically are of a general nature, such as mathematics, physics and chemistry; and second, subjects which may interlock more or less with national conditions, e.g. the biological and geographical subjects. Even so, national traditions can also dominate the thrust imparted to subjects in the first-named category.

Under this head we have elected to do the following: first, to deal synoptically with the training of natural science teachers; and second, to present models and typical examples for the subjects of geography, physical geography, mineralogy and petrology.

7.8.1 Training natural science teachers

Prospective teachers of natural science subjects at the secondary level study mathematics, physics, chemistry or biology at the universities. Not once during these studies do they bump up against the global adjustment problem in interdisciplinary collaboration, i.e. the need for the whole earth to adjust in common when it comes to natural

resources, environment, allocation of welfare, etc.

The postulates of the big global problems are very much rooted in the natural sciences. We therefore think it necessary for the university education of schoolteachers to impart not only the theoretical and methodological foundations at subject level but also take up the global adjustment problem in interdisciplinary collaboration.

Considered from these aspects, the training of biology teachers takes on special interest. Global problems receive very little mention in existing curricula. At the same time the course of events has fitted the biological sciences with a new dimension which interfaces with social science and foreign policy. This fact ought to inject elements of biology into other types of education, but it should also find expression in training the school's biology teachers.

The Office of the Chancellor has co-opted an ad hoc committee to overhaul the natural sciences curriculum. We are counting on this committee to advert to the problems here outlined and to consider the viewpoints we set out below concerning ways and means of solving these problems.

The introductory course proposed in section 7.1, "Interdisciplinary University Orientation", should therefore be introduced at the earliest into all natural science programs, this to give the studies a societal and global coherence from the outset.

Concerning the subject study of physics, chemistry and biology, it should be feasible to envisage applications to global problems of those basic learnings which are being worked up at any one moment. Efforts should be made to afford scope for a series of seminars with such applications, by analogy with what we propose for engineering education (see section 7.9).

The university training of teachers in natural science subjects runs for three years. Courses may be chosen freely during the third year. As we see it the credentials of teachers would be greatly strengthened if they were to select internationally oriented interdisciplinary courses in their undergraduate years, e.g. the above-described courses in human ecology or international relations.

7.8.2 Geography

The block subject of geography contains elements from the physical geography dis-

cipline within the faculty of science and from human geography within the faculty of social sciences. We herewith propose a revised curriculum with a stronger global perspective for the first year of studies in geography.

The goals stated for this course are: to give a total picture of the earth as Man's living space and of how Man uses the face of the earth; to give insights into the global ecosystems and the connection between the geographic environment and Man's shaping of society; to instill awareness of global problems and to give an overview of physical features, population and resources in a global perspective; to give insights into development problems and regional planning; and to train the undergraduates in geographic analysis of problems relating to resources and society.

Geography studies which emphasize this approach should be given more estimable standing in different educational programs.

7.8.3 Physical geography, mineralogy and petrology

We have commissioned the preparation of drafts which provide alternative curricula, the one for physical geography and the other for mineralogy and petrology, to cover the first year of studies in these subjects. Our intention is to make them freely elected substitutes for the existing courses. Compared with the existing curricula, the alternatives put stronger stress on non-Nordic applications. The principal vehicle here contemplated is a field course in "non-Nordic area".

7.9 Engineering

7.9.1 General internationalization of education in engineering

An internationalization of this sector is important because it involves a large group whose members are often affected by different kinds of international collaboration. Given the limited studying period (the first degrees in engineering and architecture are granted after four years) it is considered difficult to accommodate the internationalization goals in view of the other goals that govern the undergraduate engineering program. At the same time wishes are often expressed to provide the prospective engineers with more learning from other dis-

ciplines, such as the social sciences and biology. This is justified on grounds that the impact of technology on people and environments is such that there lies a danger in any kind of one-sided technical specialization which leads to looking too much at the problems from exclusively technical angles.

The wishes to impart broader frames of reference to the training of engineers closely intertwine with increased internationalization: the connections between technology and factors of a non-technical nature are often best illuminated in an international perspective. However, any major change of engineering education along these lines falls outside the purview of our commission and will probably be hard to implement within the present four-year compass.

By way of taking a first step on the road we propose that the introductory course presented in section 7.1, "Interdisciplinary University Orientation", be introduced into the engineering programs at the earliest. By rendering this education more effective it should be possible to afford room for such a short course.

The first two years of study contain mandatory courses with emphasis on mathematics, physics and basic technology. Technically applied subjects are studied during the third and fourth years, with the undergraduates often enjoying broad options to combine courses on their own. There should be good opportunities for increased internationalization during these two years of study, partly by way of special courses or seminars which can give the students who so desire a more international orientation, and partly by way of laying on international perspectives in the applied subjects. Hence a tool will be put in hand whereby technical solutions can be analyzed with other than Swedish determinants in respect of politics, costs, climate, nature, materials, etc.

The studies are to conclude with a project undertaken to satisfy degree requirements. Suggested themes for such projects with an international emphasis could be relayed by various bodies, e.g. the Swedish International Development Authority.

7.9.2 Seminars on technical applications in unfamiliar environments

We propose to institute, on a voluntary basis, series of seminars on how to go about solving technical problems in other environments

than the Swedish. The seminars should be adapted to the various engineering programs and be inserted in the third or beginning of the fourth undergraduate year. As a suggestion, we think such a series could encompass eight sessions lasting three hours each.

Technical assistance projects actually under way in developing countries can be selected for seminar treatment. As examples of such projects we mention low-cost housing in Tunisia, gravelling of rural roads in Kenya, forest industry in the Democratic Republic of Vietnam, telecommunications in Zambia and power plant construction in Tanzania.

We have worked out a more detailed example of organizing a series of seminars on the forest industry project in the Democratic Republic of Vietnam. The eight sessions would be devoted to the following topics: introduction; the DRV environment—some preconditions; raw material supplies; industry: process; industry: siting and construction; manpower and training requirements for the operational phase; financial management; execution.

In order to plan and lead these seminar series and help other teachers to internationalize the technical application subjects, we propose to establish the post of educational consultant in international technology at each of the institutes and faculties of technology.

7.10 Medicine

If any kind of education can be said to be the most international in its compass and implications, it is the education of doctors. Not only are the medical sciences universal by their very nature, but they truly embody what has been referred to as the "nonplace community", i.e. the webs of intimate contact which specialized professionals maintain with other professionals, wherever they may be.

Be that as it may, all the medical schools and joint faculty-student councils which made submissions to us have stated that measures can and should be taken to increase the internationalization of medical education. That is as good an example as any of what awareness of the surrounding world can do to make one appreciate that much more remains to be done in this respect.

Given this background, we have thought it relevant to recommend some general guidelines intended to impart a continued internationalizing thrust to the training of doctors.

The undergraduate medical curriculum should make greater provision for international outlooks and draw more upon comparative rationales to explain problems of global import. For instance, the preclinical study of community medicine could start out from scratch with an international approach to community development, social anthropology, demography, etc. The subjects of medical chemistry, clinical physiology, internal medicine and pediatrics should look at nutrition problems from the aspects of both the industrialized and underdeveloped world. The subject of infectious diseases could readily harbor more orientation to tropical diseases. Under the head of hygiene, the pollution problems of different geographic areas should be illuminated, e.g. in terms of water supply, the disposal of industrial and human wastes, etc. It will be especially important to include facts about the supply, handling and processing of food-stuffs in the instruction and to familiarize students with the effects of climate on bacteria and the effects of bacteria on the treatment of surgical diseases. In the subject of social medicine, in-depth instruction should be communicated on community medicine, community development, social anthropology and population growth. The varying parameters under which the health and medical service operate should be considered, with particular reference to maternal and child health supervision. Instruction in obstetrics and gynecology should incorporate family planning and information about the applicability of different contraceptive methods in specific cultures.

Medical practice in other countries should be credited for in Sweden. A tour of duty abroad, whether in a rich or poor country, will enrich the doctor's medical experience and broaden his professional horizons. It should therefore be credited for purposes of Swedish specialist training even if it does not altogether conform to corresponding internship in Sweden.

Specialist training in developing-country medicine is available from the Royal Caroline Institute in Stockholm with a course in tropical medicine as well as from the Nation-

al Board of Health and Welfare, which has mounted a course in medical assistance. Both these programs seem to have a purpose to fulfill.

Although we have not taken up pharmacy and odontology for separate consideration, we feel these programs should aspire to the same development.

7.11 Social work and public administration

The professional schools of social work and public administration chiefly train persons for employment with welfare agencies and local authorities. Even though the products of these schools, known as "socionomists", must necessarily conform to the regulations of Swedish social legislation and Swedish administrative procedure, it would be desirable and practicable to let international perspectives guide their training to a greater extent.

The prospective social workers should accordingly be given a nuanced view of human behaviors and emancipate themselves from ingrained notions and prejudices. In many cases the easiest way to do this is to call on them to empathize with facts of the human condition alien to those customary in Sweden. The case for empathy can be argued even more strongly on the home front, since Sweden is the home of a great many immigrants. An orientation course in social anthropology should enter into the program.

The demands of employers, based largely on their existing needs for socionomists to do certain kinds of work, have been allowed to fix the training given by schools of social work and public administration. This narrow practice should not be permitted to continue. The exercise of a profession means more than mere adjustment to tasks in the job world; it also means contributing to the process of change in the larger society. International learnings and perspectives will give such contributions a better chance of success because they will militate against regarding the conditions ruling in our country as axiomatic. The prospects for injecting graduated increments of international perspectives into the programs of these schools would appear to depend very much on forging links with research and on the earmarking of resources for international contacts.

Arrangements should be made to mount a

special in-service training course to consider the problems of immigrants.

7.12 Journalism

Prospective journalists are trained for two years at professional schools of journalism. The program offers small opportunities for broadened and deepened international learnings and outlooks, since it emphasizes practical training in a craft. Although some of the students have come from university campuses, this is not a requirement for admission to the schools of journalism.

The need for imparting a much stronger international component to the training of journalists is not solely or even primarily motivated out of deference to those journalists who will be especially concerned with foreign affairs. Since the international dependence is increasing in all areas and since global problems will become important in so many different situations, all journalists must be armed with a greater corpus of fundamental international learnings and outlooks than these schools can possibly provide. Apart from the teachers there is hardly any professional group who matter so much as the journalists when it comes to keeping the citizens abreast of what is happening in the world outside our frontiers.

By international yardsticks, therefore, w

view the present deficiencies of journalist training with serious misgivings. They will not be removable unless the current system is drastically reorganized. We favor a transfer to the universities in the form of a separate educational program, where the third undergraduate year could be devoted to vocational training. We propose the appointment of an official committee to make an unbiased inquiry into the education of journalists.

For purposes of further education we think it desirable to afford practicing journalists the opportunity to attend the universities to take specialized international studies of the kind that we have proposed, some of which have already come into being.

7.13 Agriculture, forestry, veterinary medicine

We have not delved more deeply into the programs that operate at the Agricultural College, the Veterinary College and the College of Forestry. That is not because these disciplines are unimportant. In their comments on our preliminary report III the directors of these three professional schools have drawn up guidelines for a continued internationalization of education. These endeavors should be pursued.

8 Training in professional language

8.1 Introduction

The first thing that usually springs to mind when reference is made to a language is its national or ethnic dress: Danish, English, Rumanian, Hindi and so on. But these languages are not uniform; there are many "languages within the language".

One type of these "languages within the language" are the languages used in connection with any one trade, occupation, profession, discipline or specialization. Examples are: Italian commercial correspondence, legal French, economic German, mathematical Russian, textile Chinese, electronic Japanese, banking English etc. These types of languages differ from each other, or from other languages within the language, in its vocabulary, but there may be other distinctive features as well.

The Swedish word for these types of language is *fackspråk* (from the German "Fachsprache"). In English the terms "language for special purposes" or "special languages" are used. Beside them we introduce the term "professional language".

Our proposals envision sharply expanded language training at the universities for categories of undergraduates other than prospective language specialists: engineers, physicists, social scientists, lawyers, humanists, etc. We think this training ought to be oriented to the languages of particular disciplines and future careers. But the one who takes such language training will also be acquiring general language skills.

Professional language training within the university framework can take two main forms. The one is point-awarding courses in special languages. These may either be voluntary courses, formally detached from other education (e.g. in legal English or technical French), or they may be courses which enter into an educational program or a course of

study with other subjects (examples are the earlier-mentioned educational program combining business administration and languages and the course in Eastern European social science).

The other main form provides for language training as an integral part of subject specialization: we call this "integrated-skills language training". The integrated skills can be acquired in many different ways. The most common is to include course literature in foreign languages with study of the specialized subject. Further, foreign languages can be used in lectures and seminar exercises, as well as in presenting oral or written reports on work tasks. The integrated-skills language training can also be made to include what we call "backup courses", i.e. short language courses which do not terminate in final examinations as defined by Swedish statutes and hence do not award points. Their purpose is to help the undergraduate pass in his specialty, usually by making it easier to read course literature in a foreign tongue. In short, the backup course is an aid to study of the specialized subject.

So far the language curriculum at the Swedish universities has been completely dominated by the training of prospective language teachers and other linguistic specialists. Not until recent years, and only modestly at that, have courses of a more or less special language slant begun to take shape for other student categories. We therefore felt called upon to find out what other countries have been doing in this field. Our proposals accordingly lean heavily on empirical data furnished by Sprachenzentrum der Universität Bielefeld in the Federal Republic of Germany, by the Soviet Union and other Eastern European countries, and by Great Britain.

We have also discussed the situation as regards research together with R & D pro-

jects concerning professional languages. This work enabled us to identify problems which need to be solved and which will require intensified efforts.

8.2 The case for professional language training

The internationalization process engenders ever greater needs for verbal communication with people in other countries. These needs are highly diversified, ranging from the ability to consult a dictionary to grasp the pith of a text to excellent command of a language.

In their responses to the questionnaires we circulated, the universities as well as the employers of graduates in the labor force feel there is a gap between existing language skills and the demands imposed by the job world. As the internationalization process keeps surging ahead this gap is bound to yawn wider unless the language training is strengthened. Hence no little of the inducement for the universities to offer special language training stems from the needs of the labor market.

But skills in foreign languages also serve to power the engine of internationalization through broadened contacts with and greater understanding of other countries and peoples.

On top of that comes the need to be able to read professional literature in foreign languages during the university education itself. Since the ability to read such literature is a *sine qua non* for the coming career pursuit, the universities will have to implant or upgrade this skill as part of their vocational training function. Moreover, much of the necessary or best course literature is not available in Swedish. Foreign course literature also counteracts ethnocentric attitudes and widens horizons.

University-level training in special languages should encompass not only languages excluded from the primary and secondary schools but also the languages ordinarily taught in these schools. However, there are those who argue that it must be left up to the school to meet the needs of skill in the school languages for persons other than prospective linguistic specialists. That the universities should then have to mount courses in school languages, including the one that

is most studied—English—is seen as a reflection on the schools: they have failed in their mission.

We don't see things that way at all. Even if the school were to achieve optimally effective language training, the university would still have to bring school languages under its purview for purposes of professional language training. That is because language skills acquired in school should be maintained and improved on in the university, where they will also have to home in on the undergraduates' fields of study and their future careers. The graduates, of course, are going to be in great need of oral and written communicating skills in foreign languages when they practice their specialized learnings.

Another reason why the universities must be called upon to upgrade skills in foreign languages derives from the wide spread of standards between different undergraduate categories. The need for language skills also varies. The universities should therefore provide differentiated opportunities to upgrade ability in specific languages from one undergraduate category to another.

University staff may also need special language training to enable them to perform their duties. The courses for this purpose should also recruit gainfully employed persons outside the universities.

Moreover, additional recruitment to university studies will be forthcoming from new student groups who do not have secondary school studies behind them. For these groups, too, the course literature requirements must be kept intact, at least in English. But they may not know enough English when they commence their university studies. Bearing these student groups in mind, the universities will have to mount backup courses from beginner's or elementary level in English as well.

There is no predetermined upper limit to the extent of the needs for professional language training. If anything, this is a question of potentialities: How do we satisfy the needs, all of them?

We think language training at the universities should ultimately be made compulsory for all undergraduates, which is now the case in Eastern Europe. For the time being the needs will have to be satisfied by (a) voluntary courses in special languages; (b) integrated-skills language training.

8.3 Goals for professional language training

8.3.1 General objective

In section 3.3.3 we set out the general goals for university inputs into professional language training. These goals denote that the furtherance of skills in foreign languages for all undergraduates is to be seen as an integral part of the university's vocational mission, which is to impart the kind of education that will be needed in working life.

Higher goals will have to be set for the postgraduate level, i.e. for the students who are going to become research workers. The graduates should be capable, at least in respect of most disciplines, of profiting from scientific literature in more than one foreign language. Besides, they should be able to report on their own research findings in at least one foreign language. We propose to make the postgraduate curricula specifically identify those foreign languages in which reading skill must be prerequisite to the pursuit of research.

8.3.2 Language areas

On the basis of our initial surveys we have found that the different languages can be rank-ordered by exigency in the following groups:

- 1) English;
- 2) French and German;
- 3) Russian and Spanish;
- 4) languages spoken in areas that are expected to take on growing importance, major immigrant languages and leading lingua francas or third-world languages (e.g. Japanese, Chinese, Portuguese, Finnish, Serbo-Croatian, Arabic, Hindi, Swahili);
- 5) other languages.

As far as Sweden is concerned, English is the most important working language for international purposes and will remain so for the foreseeable future. It is the language that the normal run of the undergraduate population will have to master, more or less, in order to do justice to their specialties.

But our surveys have turned up something else: a widely held belief that the Swedish educational system has accorded inordinate dominance to English. This has not only

produced a scarcity of professionals who can communicate in other languages. It has also tended to make our international dialogues in domains such as the arts, science and economics dominated by the Anglo-Saxon world.

Having due regard to demands from the labor market and to reasons of cultural policy, plus the need to tie into internationalistic strivings generally, the study of foreign languages other than English will have to be favored more than in the past. We need a great many professionals who can work with languages like French, German, Russian and Spanish, as well as smaller numbers of professionals conversant with other languages.

8.3.3 Types of skill

It is sometimes contended that training in professional languages must rest on a foundation of general language ability. The conclusion then drawn from this is that the basic language skill ought to be learned from "general texts". In some cases the conclusion is elaborated with a definition of such texts: they consist of fiction and reading matter of everyday nature.

True, general language ability is necessary to communication in scientific and professional matters. But it can also be learned from reading specialized texts. Why? Because that part of any one special language which is not technical terminology happens to be very much public property. We contend that specialized texts offer the best springboard for building up the requisite general language ability, for reasons set out below:

- 1) Seen linguistically, the specialized texts come with a double payoff built in, since they contain both technical terminology and the necessary general vocabulary and grammar.
- 2) The specialized text attaches, in a natural manner, special weight to general linguistic phenomena of the kind which have relevance to the special language concerned.
- 3) The specialized text imparts not only language skills but also knowledge of those things that the text is about. That can impart a forward push to study motivation and, as a spin-off, improve the general language ability.

The training emphasis should be put on upgrading the practical ability to communicate in everyday work situations. Generally speaking, the "reading situation" will be the most frequent, since virtually all undergraduates have to pick up course literature in foreign languages, while the ability to profit from foreign specialized literature will be vital to them in their future careers. In descending order of frequency, it would appear, come the "conference situation", the "interpersonal situation" and the "correspondence situation".

The most necessary skills will have to be given priority, this because the undergraduates are committed to non-language majors and as such can devote no more than limited time to professional language training. Grammatical and phonetic accuracy cannot be accorded the same weight as in the training of prospective linguistic specialists.

8.4 Courses in special languages

We put forward examples of curricula for professional language courses. The training can focus on different skill levels and on one or more "subskills". Among examples of the upgradable are: reading of specialized literature, oral and written reports on and discussions of the text read, keeping minutes of proceedings, drafting specimen, letters and memoranda, participating in conferences and meetings, etc.

We also propose to make courses aimable at knowledge of realia, i.e. objects to illustrate conditions in other countries.

As a rule the professional language courses will be studied voluntarily alongside the majors—to be inserted in class schedule lacunae, as a "stripe" running parallel with the subject studies or phased in after these studies are concluded. In terms of course credit, they should extend point awards from 5 (five weeks of study) on up. They should be mounted in the form of elementary courses as well as advanced courses.

Furthermore, we want courses in special languages to be increasingly developed into fixed components of the regular courses and educational programs in different disciplines.

8.5 Integrated-skills language training

8.5.1 Course literature in foreign languages

We noted earlier that course literature requirements in foreign languages do not always go down well with the students. In our opinion one must not capitulate to this sentiment under any circumstances.

It follows that we think it normal for course literature in English to be mandatory in the curricular bibliographies. Wherever possible the bibliographies should also offer selections of alternative readings in French or German. It will be up to the joint faculty-student councils to ensure that the bibliographies provide for course literature in foreign languages. Tests should be run to check out that the mandatory course literature in foreign languages has really been read and understood.

8.5.2 Instruction and assignments in foreign languages

The extent of instruction and presentation of assignments in foreign languages is of course bound to vary between educational levels and disciplines. The incidence is likely to be more or less infrequent at undergraduate level, apart from those cases where language training forms an integral part of study courses and educational programs. At post-graduate level it would be desirable to include such instruction and presentation to a great extent. Not only guest lecturers from abroad but also Swedish lecturers should be able to address their classes in a foreign tongue; diction which falls short of perfection should not be considered a barrier to using foreign languages in the classroom, at least incidentally. Positive experiences have been reported so far in cases where the working language used was a non-Swedish one.

8.5.3 Backup courses

As mentioned earlier, the backup course chiefly aims to develop the ability to read course literature in a foreign language within the ambit of a particular discipline or professional sector. By contrast with the language courses discussed earlier, the backup courses do not confer credit towards a degree. They are supporting aids to the study of the major or specialized field.

We put forward examples of backup courses in special languages. They build

above all on empirical data furnished by Sprachenzentrum der Universität Bielefeld in the Federal Republic of Germany.

The backup courses can take off from elementary level both in nonschool and school languages, i.e. at the level of primary education. But they can also build upon the completion of language studies in the secondary schools.

In the last-named case the backup course can encompass only one or a few sessions which seek to help the student cross over the initial stumbling blocks when he sets out to read specialized literature in a foreign language.

Experiences from Bielefeld show that a course running for 60 classroom hours will enable beginners to attain reading skill in a specialized language. This presupposes a contrastive method and a carefully selected language material, preferably computer programmed. The text course is generally small in size, and the text itself is meticulously analysed.

8.6 Organization and resources

8.6.1 Institutional organization

A fundamental question is whether the language departments of the universities ought to administer the training in professional languages or whether a separate language-training organization ought to be built up for this purpose.

To begin by arguing the case for a separate organization, the training in special languages is usually alien to the traditions of language departments and may require a substantial reorientation. Under a separate organization the professional language training would immediately become a cardinal mission and not a by-product on a par with the training of linguistic specialists.

To argue the case for the other side, the existing language departments command the biggest resources longer-term for differentiating their output of special courses in many different languages. It is also important to tie into the discipline-based and methodical R & D work that goes on in the university language departments.

As the normal solution we propose that these departments be made responsible for the training in professional languages and in so doing also render service to the unattached professional schools. But by the time

a few years have elapsed the departments should be evaluated for their performance. Should it then turn out that the professional language training has not taken a satisfactory development, the organizational problem can be subjected to reappraisal.

The changeover to the training in special languages will have to be chiefly effected by the language departments themselves with their own investments of time, work and money. Among other things, they must find out about educational methods and course models abroad and arrange for suitable transplants to Sweden. This can be done in various ways: by bringing in foreign experts in the subject field; by engaging the services of foreign linguists as guest lecturers; by making field trips to other countries; and by documentation.

By and by, the training in special languages may well acquire dimensions exceeding those for the training of linguistic specialists. In future the language departments should very much function as institutions of service to other parts of the university. A development along these lines could be guided by a motto which we quote from the Bible (St. Mark, 10: 43, 44): "But whosoever will be great among you, shall be your minister; And whosoever of you will be the chiefest, shall be servant of all."

8.6.2 Recruitment and in-service training of teachers

The teachers who work in special language training must not only have linguistic competence but also knowledge of particular specialties. At all events the ordinary language teachers must know enough to understand what the studied text means, but they may also need the adjunctive talents of teachers whose certification is in a specialty. The result will be to alter the pattern of teacher recruitment to the language departments, since training in professional languages represents a shift from language training as a marked-off humanistic discipline to a discipline which services different specialties.

If the language teachers are going to be able to meet the stipulated criteria, it will be necessary to offer them in-service training. This could be made to build up the corpus of specialized knowledge and, additionally, induct participants into planning and devising methods for courses in special languages.

Such teacher training has already been arranged for the newly instituted educational program in business administration and languages (see section 7.7.9). The teachers of economic subjects have gotten to study each of the related foreign languages, while the language teachers have gotten more feel for economics.

Teachers who are mainly credentialed in a specialty may also take training to qualify for language instruction.

8.6.3 Organization of studies

Various educational programs already allow the completion of professional language training to be counted towards a degree. However, greater provision needs to be made and in cases where such integration possibilities do not exist they should be created as soon as possible.

8.6.4 Allocation of resources

The national research councils should lend greater support to research on language education and professional languages. We further propose that Skr 2 million per annum be made available to the Office of the Chancellor to finance research and development, experimentation and teacher training in this area.

Additionally, resources should be voted so that special language and backup courses can be mounted to the desired extent. The appropriations should also permit mounting of intensive courses.

Sufficient planning resources should be put at the disposal of the language depart-

ments for the purpose of special language training. Once this training has acquired a certain continuity, it may be advisable to install tenured teaching posts especially for this purpose.

8.7 Center for language pedagogy

Some of the language departments are conducting separate R & D projects on language pedagogy. We think added provision should be made for a permanent organization which is specifically concerned with language pedagogy in general and which can confer greater development potentials as well as stability and continuity on the work. We therefore propose instituting a chair on language pedagogy and a center for this at the University of Göteborg. The center would be called upon to work together both with language departments in Sweden and with similar institutions abroad.

8.8 Vocational and educational guidance

It will have emerged from the foregoing that the students still do not fully appreciate the crucial role played by skills in foreign languages for their future employment prospects. The vocational and educational guidance services should therefore inform them about the need for skills in foreign languages concomitant with specialized know-how and "sell" them the benefits of enrolling in a program of training in professional languages.

9 International exchange at university level

9.1 Introduction

Our terms of reference also called for mapping out the current state of affairs as regards the international exchange of university staff and students and for putting forward proposals on how existing obstacles can be removed.

In our mapping survey we describe the work being done by Unesco, the Council of Europe and other international organizations. We also furnish glimpses of how other countries run exchange programs. Further, we report on the present Swedish conditions in this respect.

The motives we adduced earlier on behalf of internationalizing education also constitute motives to encourage the increased exchange of university staff and students between countries: such an exchange promotes the internationalization of education. But there is another aspect, too: the universities must be furnished with abundant inputs of experiences, impulses and new ideas from other countries; such "feedback" makes an essential tool for reappraising and renewing their operations, for putting their activities on a high plane.

The obstacles in the way of international exchange can be classified into four main types:

structural obstacles (design of educational systems, pay relativities, terms of employment, etc.);

formal obstacles (public laws on education, rules and regulations on leave of absence and merit rating, etc.);

communicative obstacles (language, documentation, information);

economic obstacles (travelling grants, financial aid to students).

As far as practicable we put forward proposals for removing these obstacles, the

economic and formal ones in particular. Since not all kinds of obstacles are amenable to steps taken unilaterally, they will require matching actions in other countries.

The leading principles for our proposals are:

to remove or alleviate existing obstacles to the utmost extent;

to indicate general guidelines for an increased exchange;

to let the universities themselves shape the broadened exchange.

In other words, the proposals assume that the concrete exchange will chiefly build upon local initiatives. Scope and capability for such initiatives will have to be put in hand by removing formal obstacles, by providing adequate funding, and by implementing measures to organize necessary services.

Up to now there have been no clearly spelled-out goals and cogently reasoned principles to govern the exchange program. We have therefore striven to formulate a set of guiding norms or criteria for this purpose.

It is important not to let the program be preoccupied with areas which are easiest to interface with for linguistic and other reasons, i.e. the Nordic and Anglo-Saxon countries. One should aspire to an all-round exchange which also takes in the Eastern European countries, the Western European continent and the countries of Africa, Asia and Latin America.

9.2 Studies abroad for Swedish students

9.2.1 General viewpoints

The difficulties of locating studies abroad are mainly bound up with three factors: the crediting of education abroad towards Swedish degrees, the financing of foreign studies, and information and documentation about

studies abroad. Our proposals seek to remove the obstacles in these three respects.

We think it important to encourage higher-level studies generally and postgraduate (researcher-training) education in particular. In principle, a designated period of study abroad should normally enter into the postgraduate program.

The facilities for group studies abroad (excursions, field projects, branch campuses of foreign universities) need to be expanded.

An ad hoc committee of the Swedish Labour Market Board is now handling the question of practical experience abroad.

9.2.2 Accreditation of studies

If the objective is to promote studies abroad for Swedish students, such studies should be recognized as conferring credit towards earning a degree in Sweden.

International organizations are working hard on the "equivalency issues", i.e. on devising systems and agreements which aim at reciprocal accreditation of educational achievement. Since the difficulties are formidable, a long time is bound to elapse before universally valid solutions are arrived at on the basis of international agreements. (However, an equivalence agreement is in force between the Nordic countries.)

In our opinion the problem of granting Swedish students credit for studies pursued abroad can be solved more or less satisfactorily by unilaterally taken Swedish measures.

This solution would credit foreign education towards Swedish degrees even if the overseas studies do not fully equate with the terms of Swedish curricula but serve the same primary ends. We recommend the insertion of a positively worded clause to this effect in the Swedish educational statutes. The testing should be administered on liberal grounds by a duly authorized examiner at a Swedish university. The student would be called upon to produce evidence of courses taken at the foreign university, while the examiner would make sure that these courses largely meet the same aims as in the Swedish curriculum. Entries would be recorded in the degree certificate as follows: education completed abroad, names of the foreign university and the courses taken, and identification of the Swedish program under which credit is recognized. Such accreditation shall

be allowable for a whole course of study as well as part of a course.

Recognition could also be given to foreign programs which have no counterpart in Swedish curricula, for example as electives within a Swedish educational program. Matters of this kind should be decided by joint faculty-student councils.

Our proposals are fired by the conviction that departures from Swedish curricula are to be regarded as a plus, not a minus. We take that position because such departures are bound to infuse the studies, the careers and, ultimately, the Swedish society with values other than those which can be attained from strict adherence to the Swedish curricula.

Under present rules Swedish examiners may permit students in the postgraduate program to take credit for courses taken in foreign seats of learning. We submit that they should do so even in cases where education does not fully live up to the Swedish postgraduate curricula but essentially serves the same purposes.

Where all the work required for a degree has been done abroad, and such work is not counted in Sweden for degree-granting purposes, it should be allowed to confer qualifications for professional employment in Sweden. We call upon the national government agencies to overhaul the regulations on merit rating of foreign studies with a view to achieving a more liberal and equitable rating system.

9.2.3 Financing of foreign studies

Under the regulations now in force for financial aid to students (study assistance, see p. 9), applications for study assistance to study abroad will be approved "if the studies cannot be pursued with equal advantage at a Swedish seat of learning". A restrictive interpretation has been put upon this rule. In most cases where Swedish students have received monies to study in another country, the rationale has been a shortage of intake capacity in Sweden combined with exceptional labour market demand for certain professional categories such as physicians and dentists. However, financial aid to study in another Nordic country (Denmark, Norway, Iceland and Finland) is available under the same terms as for studying in Sweden.

Since we want education abroad to be

credited towards Swedish degrees in accordance with liberal rules, the consequence should be to permit the ordinary funding system, i.e. study assistance, to be used for studies abroad to a much larger extent than is the case at present.

We propose to make study assistance payable for foreign studies of the kind that can be counted as credits in Swedish education. Questions of eligibility should be adjudicated by the educational authorities (a joint faculty-student council or an examiner), either generally for a certain type of education or in individual cases.

Even in cases where foreign education cannot be credited in Sweden, funds to pay for studies abroad should be granted under more generous rules than at present. The present proviso, which withholds approval if the studies can be pursued with equal advantage in Sweden, should be superseded by a clause sanctioning the payment of study assistance when (a) the studies abroad can be counted as education in Sweden; and (b) the pursuit of studies at a foreign seat of learning confers special benefits.

Postgraduate scholarships (researcher training, see p. 9) are now spendable abroad upon the consent of a joint faculty-student council. To simplify the processing of applications, we propose that the decision-making power be transferred to examiners.

As matters now stand, study assistance is seldom granted for studies outside Europe. We propose to have such geographic restrictions abolished.

We hope it will become more common practice in the future to relocate Swedish-sponsored studies (e.g. in foreign languages) on a systematic, grouped basis at foreign seats of learning under the auspices of Swedish universities. In such cases it would not be necessary to adjudicate on the eligibility for financial aid, since the studies would be officially pursued at a Swedish university even if they were sited abroad. The same would hold true of group travels, excursions and field projects mounted abroad by a Swedish university.

Although the ordinary university grants under the government's budget appropriations could be deployed to pay for the travelling expenses incurred by group studies, excursions and field projects, they are inadequate for this purpose. We propose setting up a special grant to strengthen the in-

ternational programs of the Swedish universities (see p. 57); the monies in this budget could be used to cover the costs of group studies and other activities abroad.

To pay for the extras that individual studies tend to run up abroad in the form of travelling expenses and tuition fees, Swedish students already qualify for so-called extra study assistance, i.e. a sum of financial aid exceeding that normally payable. However, these extra funds have to be repaid and as such really amount to a loan. To avoid economic and social discrimination in passing on eligibility for studies abroad, we recommend setting up a system of bursaries for overseas studies. All persons who receive government subsidies for such studies in the form of study assistance or postgraduate scholarships should also be entitled to the bursaries to cover the vouchered extra costs of travels and tuition fees. However, a specified upper limit should be stipulated (about SKr 1,000 per term). We figure that after a few years these bursaries would run up an annual bill of about SKr 2 million.

The Swedish Institute for Cultural Relations with Foreign Countries also makes awards of bilateral exchange fellowships; we do not propose any change in this system.

9.3 Foreign students in Sweden

9.3.1 General viewpoints

There is no accurate statistic on the number of foreign students in Sweden; besides, that is also a matter of definition. Even so, it would appear that between 7,000 and 10,000 foreign nationals are enrolled in Swedish universities. Presumably more than half are immigrant students, a diverse group made up of those who have worked in Sweden for at least two years, who are the children of immigrants, and who hold political refugee status. Nationals from other than Nordic countries may find it hard to obtain labor permits in Sweden.

Immigrant students are entitled to state provided study assistance and to stay in Sweden after finishing their studies.

Guest students are those who have been granted entry visas to study in Sweden; they must then be able to verify that satisfactory arrangements have been made for their support during the study period. They are not entitled to study assistance, nor are they permitted to work while studying (though a

qualified exception is made for summertime employment). Guest students may not remain in Sweden after finishing their studies.

These rules derive from the general principles laid down in the Aliens' Act 1954, as amended.

Up to now it cannot be said that guest students have been given a reception which squares with any consistently thought-out principles. The non-quoted university programs have admitted those foreign students who meet the scholastic qualifications. But apart from limited exceptions our country has not adapted its university education to the particular needs of guest students. By and large, too, they are left to cope with their studying and financing situation as best they can.

We submit that the reception of guest students should be based to a greater extent on cogently reasoned principles, with priority consideration to go to special study programs and to educational levels above the first degree. Further, our universities and other agencies concerned ought to assume greater responsibility for the studying situation of foreign students, and the student welfare and counselling services will have to be expanded.

9.3.2 Working towards a first degree in Sweden

Not all guest students will find it worth their while to work their way towards a Swedish first degree. They will have to learn Swedish, which takes time, and the knowledge gained will often have limited value since guest students are not permitted to stay on after finishing their studies. Guest students cannot obtain study assistance or labor permits. Moreover, apart from certain quoted programs to which guest students can hardly gain admission (medical studies, for instance), the Swedish first degrees are not especially well-known abroad, for which reason they may prove less useful on the labor markets of other countries.

It follows that trying to increase the recruitment of guest students to complete the whole undergraduate program is not worth aiming at directly. For that matter, the Swedish International Development Authority does not think it generally desirable to bring in students from the developing countries to enroll in undergraduate education in Sweden.

9.3.3 Postgraduate education, special programs

We prefer instead to lend stronger encouragement to guest-student enrolments at the postgraduate, researcher-training level, i.e. in courses which build upon the first degree granted in other countries. Our universities are often in a position to offer special advantages at this level. The instruction can also be adapted more readily to individual needs. Even certain special courses at undergraduate level may be suited for foreign students. Wherever possible, it would be desirable to mount the relevant courses in a foreign language.

Further, provision should be made to expand special programs of study for foreign students.

The Swedish universities, acting in partnership with the Swedish International Development Authority, should increase their collaboration with developing countries on educational matters.

9.3.4 Qualification and selection

The question of qualification and selection for university studies is under investigation by another ad hoc committee, with foreign students included in the terms of reference. A likely result of the inquiry will be to require foreign students to satisfy the same prerequisites in their homelands that hold for Swedish students before they are permitted to enter universities in Sweden. This will intensify demands for the evaluation of foreign education.

We propose that guest students also be given access to a specified number of places in programs with restricted intakes. A separate admission quota should perhaps apply to guest students.

9.3.5 Instruction in Swedish

Instruction in Swedish for foreign students is offered by several universities. The ability to keep up with university instruction in Swedish will require at least six months of study, often longer.

We think the training in Swedish can be rendered more effective and that funds should be set aside for research on and further development of the teaching methods. The instruction should adhere to those principles for training in professional languages which we presented in section 8. In

addition to learning the basics, foreign students should also be enabled to enroll in shorter backup courses in Swedish of the same type that we want to be made available to Swedish students of foreign languages.

9.3.6 Financing of living costs

We propose continuation of the present system which allows state provided study assistance to immigrant students but not to guest students. The main reason for this is that such assistance has to be repaid and as such does not make a suitable financing form for visiting students, who are presumed to leave Sweden after finishing their studies.

The Swedish Institute awards certain government scholarships to guest students. These grants are partly bilateral, being based on treaties between Sweden and some other countries. In addition there are 100 stipends, known as guest scholarships, which are announced in international competition. These may be held for at most three years: the amount of stipend is meant to defray the necessary living expenses. The guest scholarships are also intended for other kinds of studies than university studies.

In our opinion the bilateral scholarship systems should not be extended; however, they should be retained in those cases where bilateralism is the only way of bringing about an exchange with other countries. On the other hand we think a greater number of guest scholarships should be sought in free international competition.

We propose to increase the number of guest scholarships gradually from 100 to 250 over a three-year period. The cost of 250 stipends is estimated at Skr 3.75 million.

9.3.7 Information and service

It is imperative to provide foreign students with better information about studying opportunities in Sweden. More often than not guest students feel they have been given misleading or obscure information.

In the matter of rendering service to foreign students, reference is made to section 10.3.

9.4 Swedish university staff abroad

9.4.1 General views

If university education is going to be at all internationalizable, there is no escaping the

necessity to afford Swedish university staff with good opportunities to gain work experience abroad—whether they attend congresses, conferences and symposia, join research teams, teach in class, make field trips for various purposes, etc. Not least important, much better opportunities of this kind should be opened to younger teachers and researchers: the resulting international contacts and stimuli will have major spillover effects because these people will be interacting with their students for a long time to come.

Overseas journeys are financed out of appropriations to pay for day-to-day university operation, as well as by the research councils, private foundations and other sources. The biggest obstacle to an international exchange is that there is not enough money to meet the needs.

9.4.2 Principles for the international exchange

It is easier to get grants for overseas journeys with a research aim than for purposes which directly concern education. Eminent researchers find it easier to obtain funds than younger researchers and staff with mainly teaching duties.

We think better opportunities to sojourn abroad should primarily be created for younger researchers, holders of teaching posts, for studies of foreign university education and for teaching in other countries. The Swedish universities do not know enough about the design of university education in other countries; we should be more receptive to outside impulses that can help us renew the methods, curriculum and structure of higher education in our country.

It would be desirable to enable younger teachers to take active part in the regular educational work at foreign universities. Towards this end, cooperation agreements should be reached with foreign universities or their subdivisions (colleges, departments, etc.). Among other things, we would like to arrange for Swedish and foreign university teachers to switch posts on a temporary basis. A Swedish teacher should be thus detachable from his regular organization to serve one year abroad in every five-year period.

Work at a foreign university should be given full credit towards applying for a post in Sweden.

9.4.3 Financing

We propose a new financing source for overseas journeys alongside those already existing, namely a special appropriation to strengthen the international arm of Sweden's universities (see p. 57). The appropriation is meant to thump up the opportunities for foreign travels.

Under the present system, public grants for this purpose may not be spent on journeys outside Europe unless the Government gives its consent in each special case. We propose to have such geographic restrictions abolished.

9.5 Foreign teachers and researchers in Sweden

9.5.1 General views

We look upon the participation of foreign university staff in Swedish education and research as an important instrument to internationalize education and to create an international environment at the Swedish universities.

Swedish citizenship is not required for employment with a university in Sweden. But apart from lecturers in languages, the number of aliens who hold university teaching posts in Sweden is small. Foreign teachers chiefly serve by giving occasional lectures.

We think it desirable to aim at longer-term engagement of foreign teachers and researchers in the universities' regular undergraduate and postgraduate programs, not least younger professionals.

9.5.2 Principles for the exchange

We recommend three main ways to secure the increased participation of foreign teachers and researchers.

First, Swedish and foreign university teachers should be enabled to switch posts for a specified period.

Second, the universities should be given funds to engage the temporary services of foreign teachers and researchers alongside the permanent teaching staff.

Third, a number of special, specified-term posts should be established for foreign teachers and younger researchers, likewise alongside the permanent teaching staff.

9.5.3 Financing

The new appropriation we propose to strengthen the international arm of our universities (see p. 57) is intended to defray the costs of guest lectures, engage the temporary services of visiting teachers and researchers, cover the expenses incurred by foreign professionals in travelling to and from Sweden, pay for working material and secretarial assistance, etc.

To permit attaching foreign teachers and researchers to Swedish universities for a maximum term of three years, we further propose the establishment of 30 posts for visiting professors and 30 posts for visiting research fellows or assistants. Upon nominations from the universities, these should be distributed between them by the Office of the Chancellor. The costs are estimated at upwards of Skr 6 million per annum.

9.6 Cooperation agreements and services

To promote the exchange of university staff and students, we propose that universities and departments strive towards cooperation agreements with counterpart institutions in other countries. What we mostly have in mind here are not general agreements to cooperate but contracts for concrete projects.

A more effective exchange program will require documentation, information and service not only for Swedish students and staff members who travel abroad, but also for foreign students and staff members who come to Sweden. We therefore propose forming a network of international secretariats, with the headquarters unit to be located at the Office of the Chancellor and the other secretariats at the universities. This proposal is set out at greater length in section 10.3.

9.7 Economic resources

Accounted for above were our proposals for appropriations to finance scholarships for the overseas studies of Swedish students, for the pursuit of studies in Sweden by visiting students, and to permit special posts to be established for foreign teachers and researchers at the Swedish universities.

The costs of international exchange can be financed out of the universities' current operating budgets to a very limited extent only. But as will have emerged from the

foregoing, we also propose a special appropriation to strengthen the universities in their international activities. This appropriation should be built up gradually over a three-year period to a corpus of SKr 10 million. Spread out across all the university departments, that comes to an average SKr 17,000 per department. (Added to that we have the aforementioned grants to pay for scholarships and the salaries of foreign teachers and researchers, plus the possibility of drawing upon current university budgets). The appropriation should be distributed among the universities, which are to be vested with discretionary spending powers for the following purposes:

group studies in other countries (excursions, field projects, field trips, collective studying programs at foreign universities);

overseas sojourns for Swedish teachers, researchers and educational administrators; costs of seconding foreign teachers and researchers to Swedish universities (temporary employment, travelling expenses, working material and secretarial assistance, etc.).

The main reason why we prefer a special appropriation to strengthen international activities to increasing the ordinary university grants is that we want to make sure the monies will precisely redound to the benefit of the international exchange program.

The total grant-in-aid rise we propose for international exchange amounts to about SKr 20 million, which is roughly equivalent to one percent of the total expenditures on higher education and research.

10 Administrative and functional structures

10.1 Internationally oriented institutes, centers and posts

An internationalization of university education must be anchored in the university departments, which are usually organized by disciplines, as well as in the normal teaching posts. But a spur to more internationalized education and research can also be galvanized by institutes and centers of specific international orientation.

The now-operating centers of this kind vary in their organizational structure and in their ties to the universities. Some are area centers, a group that includes the Africa Institute in Uppsala and the Asia Institute in Copenhagen, both on a common Nordic basis, the Latin America Institute in Stockholm and the department for Eastern European research at the University of Uppsala. Others have a different focus, e.g. the institute for international economics and the department for international pedagogy linked to the University of Stockholm, the centers for peace and conflict research at the universities in Uppsala, Lund and Göteborg, and the multidisciplinary center in Göteborg.

We think additional provision may have to be made for tertiary establishments of this kind, e.g. in the form of some new area centers. Further, we think these centers should be more intimately geared to the research and educational programs of the university departments and be provided with sufficient basic resources for these purposes.

In addition, consideration should be given to the need for international specializations when new posts are to be established and whenever the job content of vacancies in university departments is to be subjected to renewed examination.

10.2 In-service training of university teachers

A point we stressed earlier in connection with primary and secondary schooling is that changing curricula will not suffice to internationalize education. This is very much a question of teacher attitudes.

For this reason we have discussed general measures affecting the work and environment of universities, e.g. in respect of the thrust to be imparted to research, the training of researchers and changes of the university structure intended to foster innovation. Our proposals for increased international exchange are also relevant to the present context.

It should also be feasible to organize the direct further education of university teachers to make it harmonize with the endeavors to renew education in an internationalizing direction. This could take the form of a refresher course which either aims at general orientation and perspective shifting or prepares for specific educational assignments, for new tasks generated by curriculum changes and the introduction of new educational programs.

The present program of "executive development" (designed for teachers plus prefects and directors of studies at the departments) should accommodate instruction on systems and procedures for internationalizing education. This program should be expanded at the earliest to enable all teachers to partake of its benefits.

If we are really serious about internationalizing university education, it cannot help but have consequences for those resources which are reserved for in-service training in this sector.

10.3 International secretariats and committees

In some other countries international secretariats and committees are to be found both at the universities and on the national level. We have concluded that similar bodies will have to be formed in Sweden to promote internationalized education in general, but above all to deal with practical matters in connection with the international exchange of staff members and students. International secretariats have another *raison d'être*: the commitments to promote cooperation on university affairs that Sweden has made within international organizations such as Unesco, the Council of Europe and the OECD.

We propose to establish (a) an international secretariat at the Office of the Chancellor and (b) local international secretariats at the universities.

Among the shared functions of the central and the local secretariats: documentation and information about foreign university education; and mapping, information and reporting on the planning and extent of the international operation.

The following would be major tasks for the local secretariats: counselling Swedish undergraduates, staff members and researchers travelling abroad for purposes of studying, pursuing research and taking employment; rendering service to foreign students, teachers and researchers; administering courses in Swedish and other special programs for foreign students; rendering service concerning exchange of staff members; and rendering service and assistance towards reaching cooperation agreements with foreign universities.

The following would be major tasks for the central secretariat: furnishing information to other countries about university education in Sweden; handling matters of cooperation with international agencies; and administering business relating to the evaluation of education.

We propose that the central secretariat be

staffed with eight employees, the local secretariats of larger universities with six employees and the smaller university secretariats with four employees. The costs of running the secretariats are estimated at about SKr 3 million per annum.

Further, an international committee should be set up at every university. The committee would have an advisory capacity concerning international policy and activities of the university.

10.4 The task ahead

An increased internationalization of university education will have to proceed in increments, with local initiatives and central measures interacting throughout. This is a development process that will require a concerted attack and a concerted system of monitoring over a period of years.

We call upon the Office of the Chancellor, on the basis of our proposals and those comments thereon that will be forthcoming from the universities and other submission bodies, to draft an action program for increased internationalization of university education. Further, a vehicle of consultation should be established, this to take the form of a permanent reference group that would follow the course of events and initiate the taking of steps as required. We also propose to set up a separate reference group for professional language training.

The efforts to internationalize education must be a universally shared concern. A draft recommendation concerning education for international understanding, cooperation and peace and education relating to human rights and fundamental freedoms will be tabled before the 1974 fall session of the Unesco General Assembly. Our viewpoints and proposals are in line with this draft recommendation. Sweden should be actively committed to the endeavors of international organizations on behalf of internationalizing education.

The Internationalization Committee of the Office of the Chancellor of the Swedish Universities welcomes any comments on this publication, as well as material on internationalizing university education, from governments, universities, professional schools, organizations and individuals in other countries. We invite you to write to Utbildningsbyrån, Office of the Chancellor of the Swedish Universities, Box 16 334, S-103 26 Stockholm 16, Sweden.